436-14

ENGLISH BOTANY;

OR,

COLOURED FIGURES

OF

BRITISH PLANTS,

WITH THEIR

ESSENTIAL CHARACTERS, SYNONYMS, AND PLACES OF GROWTH:

TO WHICH WILL BE ADDED,

OCCASIONAL REMARKS.

BY

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PRESIDENT OF THE LINNÆAN SOCIETY.

THE FIGURES BY

JAMES SOWERBY, F.L.S.

——"VIRESQUE ACQUIRIT EUNDO."

VIRG.

VOL. V.

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MDCCXCVI.

G.R. III.

June 1st 1795 Published by Jas Sowerby

SATYRIUM repens.

Creeping Satyrion.

GYNANDRIA Diandria.

GEN. CHAR. *Nectary* an inflated roundiſh bag behind the flower.

SPEC. CHAR. Roots fibrous, creeping. Leaves ovate, radical. Flowers leaning one way.

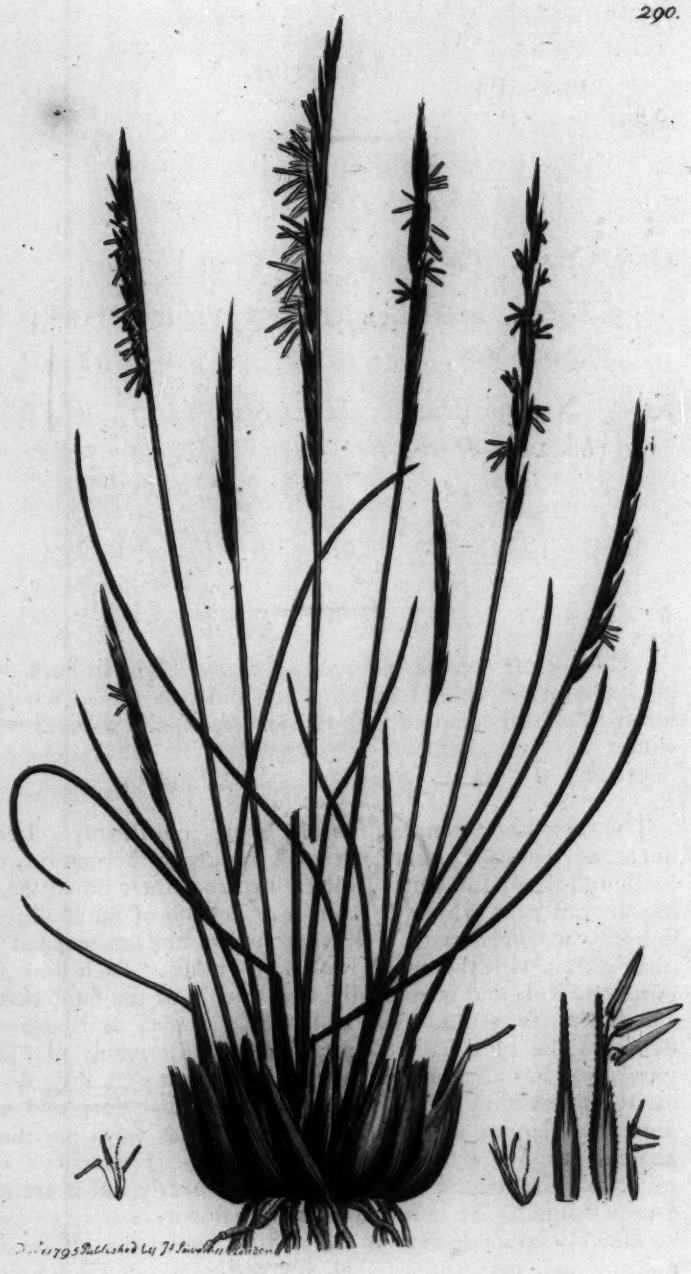
SYN. Satyrium repens. *Linn. Sp. Pl.* 1339. *Hudſ. Fl. An.* 387. *With. Bot. Arr.* 982. *Lightf. Fl. Sc.* 520. *f.* 22. bad. *Dickſ. Dr. Pl.* 85.

ACCORDING to the cuſtom we have hitherto adopted of beginning each volume with ſome peculiarly intereſting plant, we here exhibit one of the moſt rare of the favourite Orchis tribe, for which we are obliged to James Brodie, eſq. the gentleman who diſcovered *Pyrola uniflora* (t. 146.) in Scotland and communicated it to Mr. James Hoy, as Mr. Hoy himſelf has informed us ſince our account of that plant was publiſhed. This *Satyrium* grows in Alpine fir foreſts, not in "paſtures and thickets." Our ſpecimens were ſent freſh from Scotland by the poſt, and came in perfectly good order, as plants of this tribe dry ſo very ſlowly.

The roots are perennial, truly creeping, not bulbous, very ſucculent, downy, running among moſs, and attaching themſelves to decayed fragments and leaves of fir in the manner of fungi. Leaves in tufts at the end of each runner, on broad ſheathing footſtalks, ovate, ſucculent, ſtrongly 5 or 7-ribbed, and reticulated with tranſverſe veins which are often brown, and the leaves are now and then prettily chequered with that colour. Stalks erect, 6 or 8 inches high, round, downy upwards, clothed with a few alternate ſheathing bracteæ, and terminated with an erect ſpike of numerous pale fleſh-coloured fragrant flowers, leaning one way, but turning a little ſpirally round the ſtalk; each being accompanied by a lanceolate, concave, coloured, downy bractea, longer than the germen, which alſo is clothed with viſcid downineſs, as well as the three broader external petals. Haller deſcribes the flower as having only three petals, beſides the nectary, which Lightfoot copies, having probably never ſeen the plant alive, for his plate is exceſſively faulty. Mr. Sowerby found two internal lanceolate petals (as in the figure) which, like thoſe of *Orchis uſtulata*, are very difficult to be detected in a dried ſpecimen, being "glued as it were" to the upper one, which the others are not by any means, though Haller ſays they are. Perhaps that great naturaliſt might make ſlight notes in the field, and confuſe himſelf in copying them afterwards. Lightfoot's account is compiled from Haller's without acknowledgment. His whole book is nearly made up of ſuch plagiariſms, and he is hence often deſervedly led aſtray.

SATYRIUM repens.

Creeping Satyrion.



Dec.1795 Published by J.t Sowerby London

NARDUS ſtricta.

Mat-graſs.

TRIANDRIA Monogynia.

GEN. CHAR. *Cal.* none. *Corolla* of 2 valves.

SPEC. CHAR. Spike ſlender, erect, the flowers all pointing one way.

SYN. Nardus ſtricta. *Linn. Sp. Pl.* 77. *Hudſ. Fl. An.* 22. *With. Bot. Arr.* 54. *Relh. Cant.* 21. *Sibth. Ox.* 33.

Gramen ſparteum juncifolium. *Raii Syn.* 393.

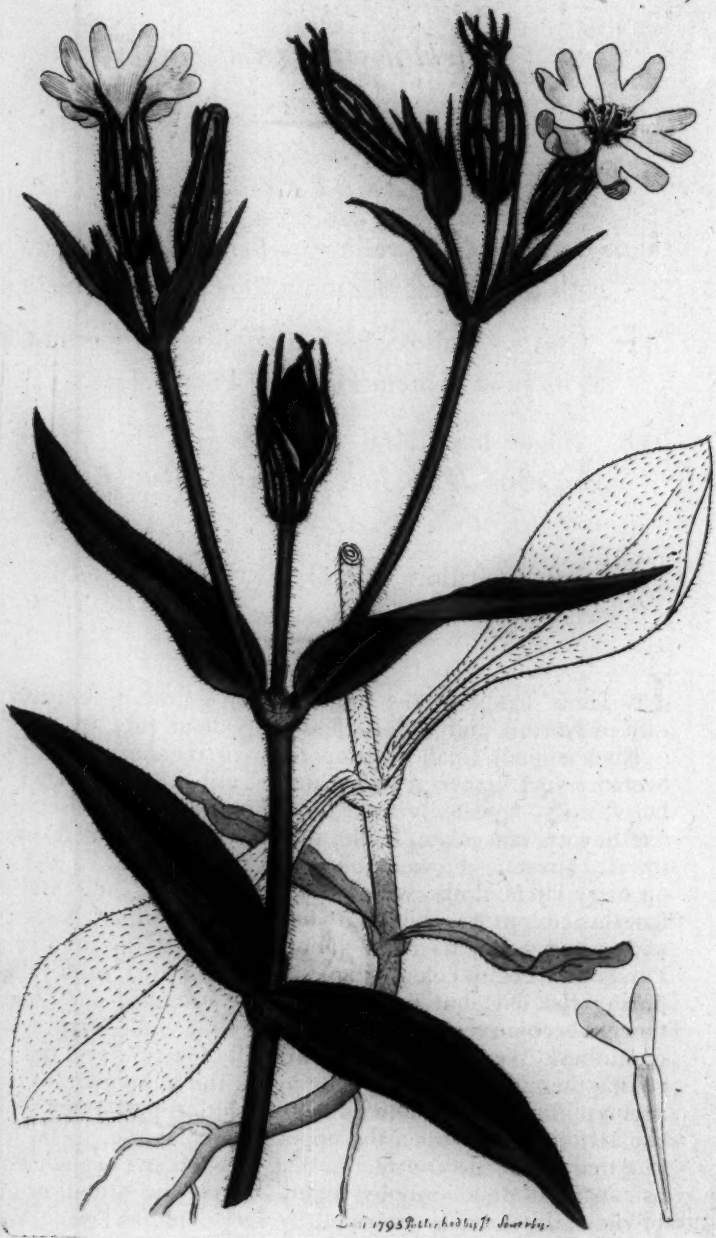
THIS graſs may be obſerved on ſandy heaths in moſt parts of England, eſpecially in moiſt or mooriſh ſpots, where it forms thick tufts of rigid ruſh-like leaves, which remain through winter

——"bleaching in the northern blaſt."

The roots are perennial, fibrous, ſtrong and downy. Leaves linear, very narrow, acute, ſtriated, rough in the margin, very harſh and rigid, ſuddenly divaricating from their broad ſheathing ſtriated baſe, which envelops the bottom of the ſtalk, and is itſelf enveloped with ſcales externally, and crowned at the divarication with the uſual ſtipula of graſſes. Each ſtalk ſupports one leaf, and is erect, ſtriated, rough, of the ſame texture and harſhneſs as the leaves, and a little longer, bearing a very ſlender ſpike of equally ſlender flowers, alternately placed in two rows, but all pointing one way, though very little divaricated at any time from the ſtalk, and both before and after flowering clapped cloſe to it. Valves of the calyx unequal in length, purpliſh and rough in the margin. Filaments a little exceeding the longeſt valve, tipped with nearly linear antheræ. Germen ſmall. Style ſolitary, ſlender, downy.

The Mat-graſs flowers in May, June or later. Of its agricultural uſes little can be ſaid, for cattle in general refuſe it; and though mats or baſkets might be made of it, we are ſupplied from Spain with better graſſes for thoſe purpoſes, particularly *Stipa tenaciſſima.*

G.R.
III.



SILENE noctiflora.

Night-flowering Catchfly.

DECANDRIA Trigynia.

GEN. CHAR. *Cal.* ſwelling. *Petals* 5, with claws, and with a crown at the mouth. *Capſ.* three-celled.

SPEC. CHAR. Calyx with ten angles, and teeth as long as its tube. Stem forked. Petals cloven.

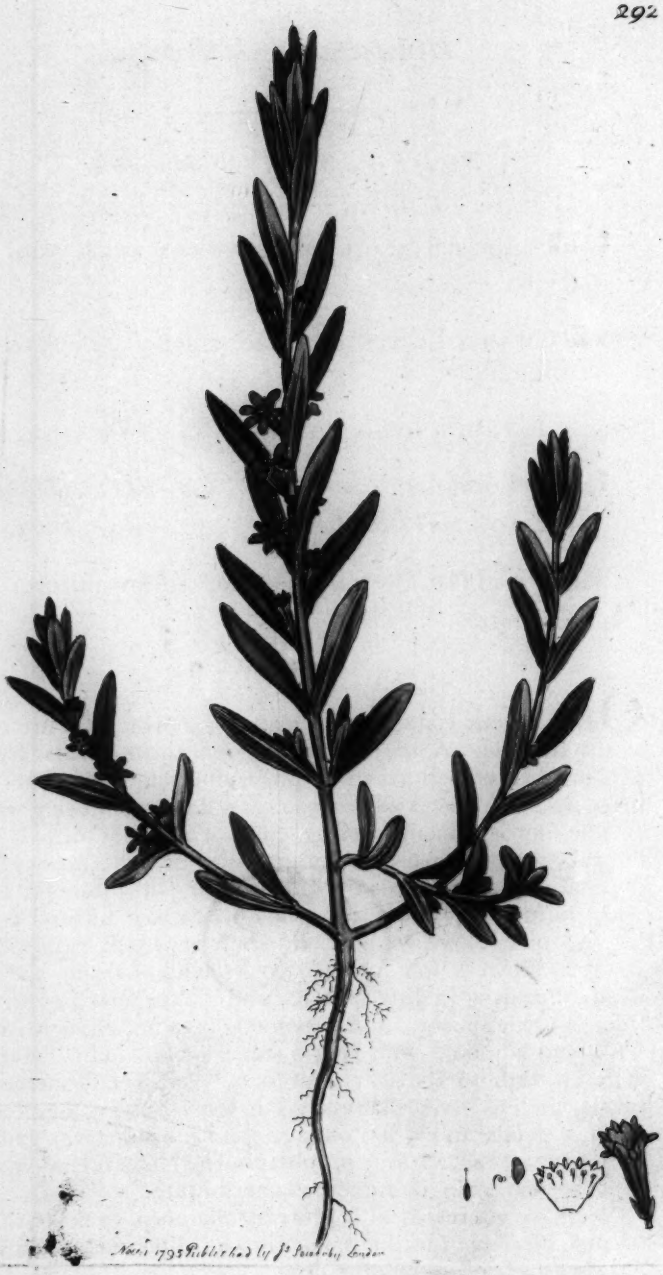
SYN. Silene noctiflora. *Linn. Sp. Pl.* 599. *Hudſ. Fl. An.* 189. *With. Bot. Arr.* 452. *Relh. Cant. Suppl.* 1. 13. *Sibth. Ox.* 140.

Lychnis noctiflora. *Raii Syn.* 340.

IN ſandy fields of the midland and ſouthern counties, not rare in Norfolk and Suffolk, flowering about July.

Root annual, ſmall in proportion to the herb, which often becomes very luxuriant in a manured ſoil. Stem erect, round, hairy, leafy, repeatedly forked in the upper part. Leaves ſoft and downy, lanceolate, ſeſſile, the lower ones broadeſt, and the loweſt obovate. Flowers ſolitary at the diviſions of the ſtem, on hairy viſcid ſtalks, which are ſhort at firſt, but afterwards lengthened out to about an inch. Calyx white, with green angles and veins, its teeth almoſt as long as the tubular part. Petals of a cream colour tinged with red, their limb rolled in during the day, but unfolding in the evening, and then the flowers become very ſweet-ſcented, at leaſt while warm weather continues. We believe each flower laſts ſeveral days, the petals rolling themſelves up every evening till the impregnation is fully accompliſhed. If ſo, how is this involution performed? Does the action of light upon the upper ſurface of each petal ſtimulate that ſurface to contract? The phænomena of ſuch flowers as expand or ſmell only by night, deſerve the attention of the phyſiologiſt, for they are ruled by very conſtant laws. We recommend them to the evening meditations of the philoſophic recluſe, at "that beſt hour of muſing" when the mind turns to Nature and its Author with peculiar complacency.

GR III.



Nov.1 1795 Published by J.t Sowerby, London

LYTHRUM hyſſopifolium.

Hyſſop-leaved Graſs-poly.

DODECANDRIA Monogynia.

GEN. CHAR. *Cal.* with 12 teeth. *Petals* 6, inſerted into the calyx. *Capſule* with 2 cells, and many ſeeds.

SPEC. CHAR. Leaves alternate, linear-lanceolate. Stamina ſix.

SYN. Lythrum hyſſopifolium. *Sibth. Ox.* 149.

L. Hyſſopifolia. *Linn. Sp. Pl.* 642. *Hudſ. Fl. An.* 206. *With. Bot. Arr.* 490. *Relh. Cant.* 183.

Salicaria Hyſſopi folio latiore, & anguſtiore. *Raii Syn.* 367.

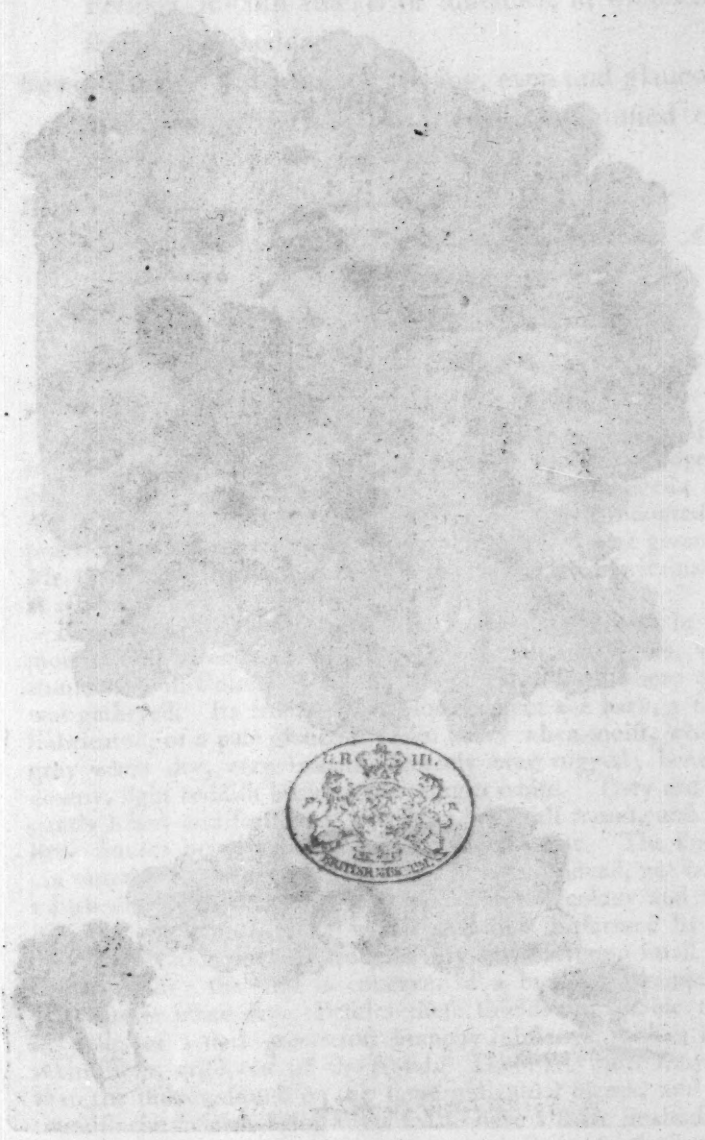
ONE of our rarer Engliſh plants, for which we are obliged to the Rev. Mr. Abbot of Bedford and the Rev. Mr. Hemſted of Newmarket. It grows in pits and ditches which are partly dried up, or in places where water has ſtagnated during winter.

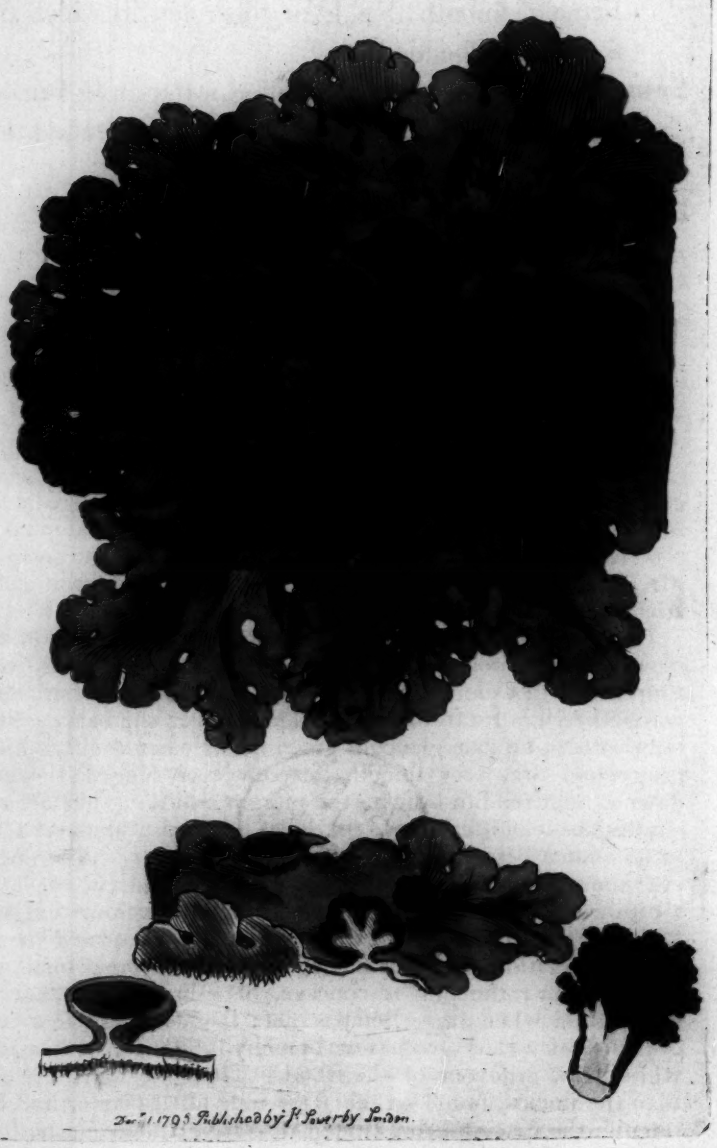
The root is annual, tapering, and not much branched. Stems ſeveral; the principal erect, often branched; lateral ones ſpreading and curved upwards; all ſquare, purpliſh, ſmooth, clothed with numerous, alternate, ſmooth, entire, linear-lanceolate leaves, ſome of which now and then approach to an elliptical figure. Flowers ſolitary, axillary, ſeſſile, delicate and ſhort-lived, appearing in July, purple, and of a regular figure, as we think all true ſpecies of *Lythrum* ought to be, though Linnæus has admitted ſome with very unequal petals. They have generally 12 teeth to the calyx, alternately erect and ſpreading, 6 petals, and as many ſtamina; but ſome flowers have only 10 teeth, 5 petals and 5 ſtamina, or (as Linnæus ſays) exclude a ſixth part of the natural number in their fructification. The ſeeds are exceedingly numerous and minute.

We have ventured, with profeſſor Sibthorp, to make the Linnæan ſubſtantive ſpecific name into an adjective, as on former occaſions where it could be done.

LYTHRUM hyssopifolium.

Hyssop-leaved Grass-poly.


G.R. III.



Dec.ʳ 1.1795 Published by J.ᵗ Sowerby London.

LICHEN glomuliferus.

Ball-bearing Lichen.

CRYPTOGAMIA Algæ.

GEN. CHAR. Male, ſcattered warts.

Female, ſmooth ſhields or tubercles, in which the ſeeds are imbedded.

SPEC. CHAR. Foliaceous, creeping, even and glaucous above, bearing dark-green, branched, tufted excreſcences. Shields tawny.

SYN. Lichen glomuliferus. *Lightf. Scot.* 853.

L. laciniatus. *Hudſ. Fl. An.* 544. *With. Bot. Arr. V.* 3. 198.

Lichenoides ſubglaucum cumatile, foliis tenacibus, eleganter laciniatis. *Dill. Muſc.* 197. *t.* 26. *f.* 99.

THIS is by far the largeſt and broadeſt *Lichen* known, often meaſuring two or three feet in diameter, and therefore Scopoli's original name *ampliſſimus* ought not to have been changed; but Mr. Lightfoot's is ſo apt, and has been ſo generally adopted by practical botaniſts, we retain it in preference to that given by Mr. Hudſon, *laciniatus*, which is not expreſſive nor diſcriminative at all.

Lichen glomuliferus is found on the trunks of trees in old mountainous woods in England, Scotland, and Wales, very abundantly in Colonel Johnes's woods at Hafod, where ours was gathered. Its fronds ſpread looſely over the bark, a little imbricated, of a pale glaucous green above when moiſt, whitiſh grey when dry, very ſmooth, ſcarcely ever rugged; beneath downy, light reddiſh brown, the margin white. They are elegantly lobed and ſcalloped, the lobes being all round, and the little ſinuſes between them often quite circular. The ſhields are numerous, and by no means very rarely produced, not large, a little elevated, their margin ſmooth, of the colour and ſubſtance of the frond, out of which indeed it is formed by the gradual elevation and increaſe of the ſhield from a ſmall immerſed point; the diſk is concave, of a browniſh orange-colour, darker when dry. Beſides theſe ſhields remarkable tufts or balls, of a dark-green ſoft branchy ſubſtance, with a ſolid white ſtem, ariſe out of the frond. Theſe are more frequent than the ſhields, found on the ſame individual plants, and diſtinguiſh the ſpecies, being ſuppoſed to have a ſhare in the fructification. We will not add any new conjectures to thoſe to be found in Withering and Lightfoot, in both which authors this curious plant is well deſcribed.

LICHEN glomuliferus.

Ball-bearing Lichen.

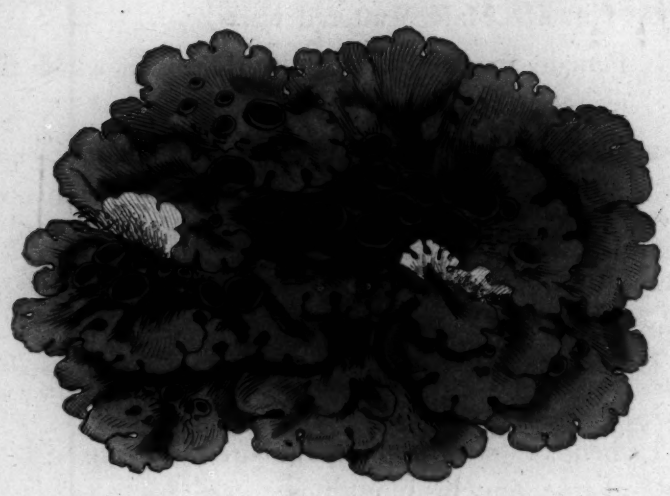
CRYPTOGAMIA &c.

Gen. Char. Male, scattered warts.

Female, smooth shields or tubercles, in which the seeds are imbedded.

Spec. Char. Foliaceous, creeping, even and glandous above, bearing dark-green, hemispherical, radical capsules. Shields tawny.

T. Johnson del. 1794. Pl. 44. Fig. 1.



Dec.r 1795 Published by J.s Sowerby London.

LICHEN læte-virens.

Bright-green Lichen.

CRYPTOGAMIA Algæ.

GEN. CHAR. Male, ſcattered warts.

Female, ſmooth ſhields or tubercles, in which the ſeeds are imbedded.

SPEC. CHAR. Foliaceous, creeping, obtuſely lobed and crenated; bright green above; whitiſh, downy and without veins beneath. Shields tawny.

SYN. Lichen læte-virens. *Lightf. Scot.* 852. *Dickſ. Dr. Pl.* 23.

L. herbaceus. *Hudſ. Fl. An.* 544. *With. Bot. Arr. V.* 3. 195.

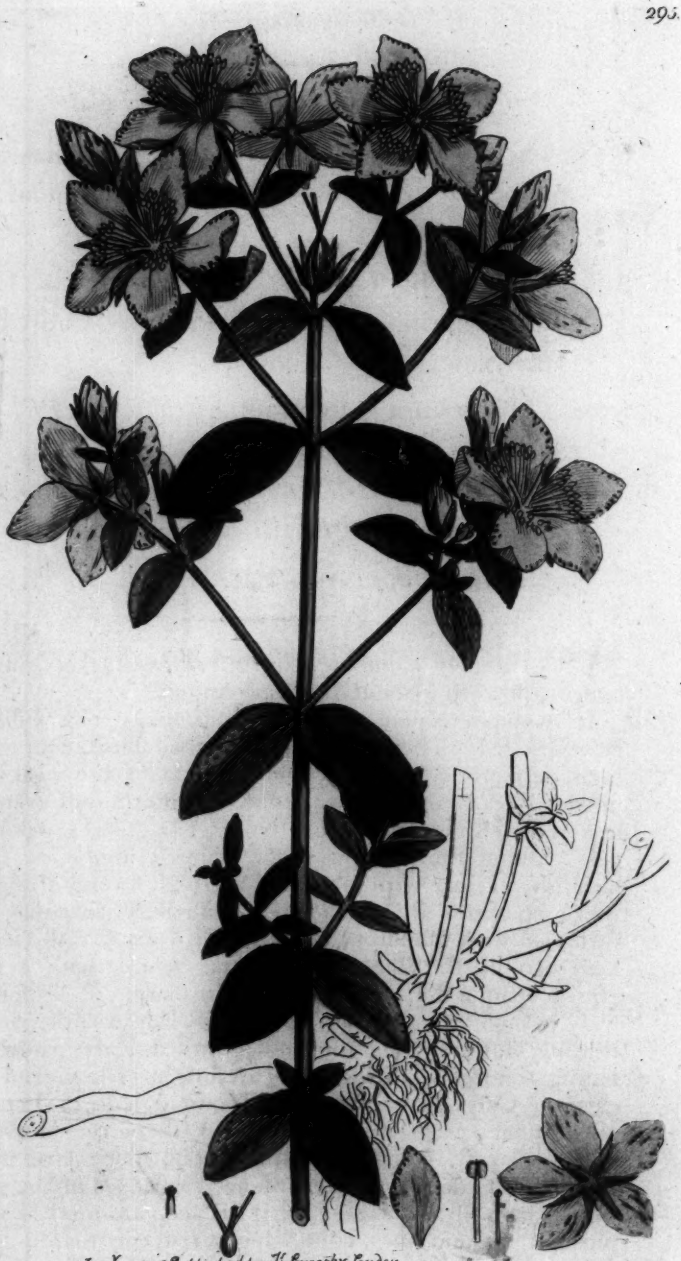
Lichenoides arboreum cinereo virens, tenue & læve ubique, ſcutellis minoribus. *Raii Syn.* 73.

L. læte virens, ſcutellis fulvis. *Dill. Muſc.* 195. *t.* 25. *f.* 98.

THIS *Lichen* is next akin to that in our laſt plate, but a perfectly diſtinct ſpecies. We prefer Mr. Lightfoot's name alſo in this inſtance, becauſe it has been moſt generally received, and is expreſſive of the peculiarly beautiful green which this plant aſſumes when moiſtened. Beſides, *herbaceus* in botanical language is too generally uſed to expreſs duration, to be intelligible when applied to colour.

The ſpecies before us is found in ſimilar places with the preceding, but more frequently, eſpecially in Derbyſhire and Weſtmoreland. It differs from that in being thinner, leſs extenſive, without the tufted excreſcences, and of a very different colour. When dry it becomes brown. The ſhields are copiouſly produced, a little elevated, their margin ſmooth, turned in, their diſk deep orange, turning brown in drying.

G.R. III.
BRITISH MUSEUM



Jan.y 1. 1796 Published by J.t Sowerby London

HYPERICUM perforatum.

Perforated St. John's Wort.

POLYADELPHIA Polyandria.

GEN. CHAR. *Cal.* 5-cleft. *Petals* 5. *Filaments* numerous, united at the baſe into 3 or 5 ſets. *Capſule* roundiſh.

SPEC. CHAR. Styles three. Stem two-edged. Leaves obtuſe, ſprinkled with pellucid dots. Calyx-leaves lanceolate.

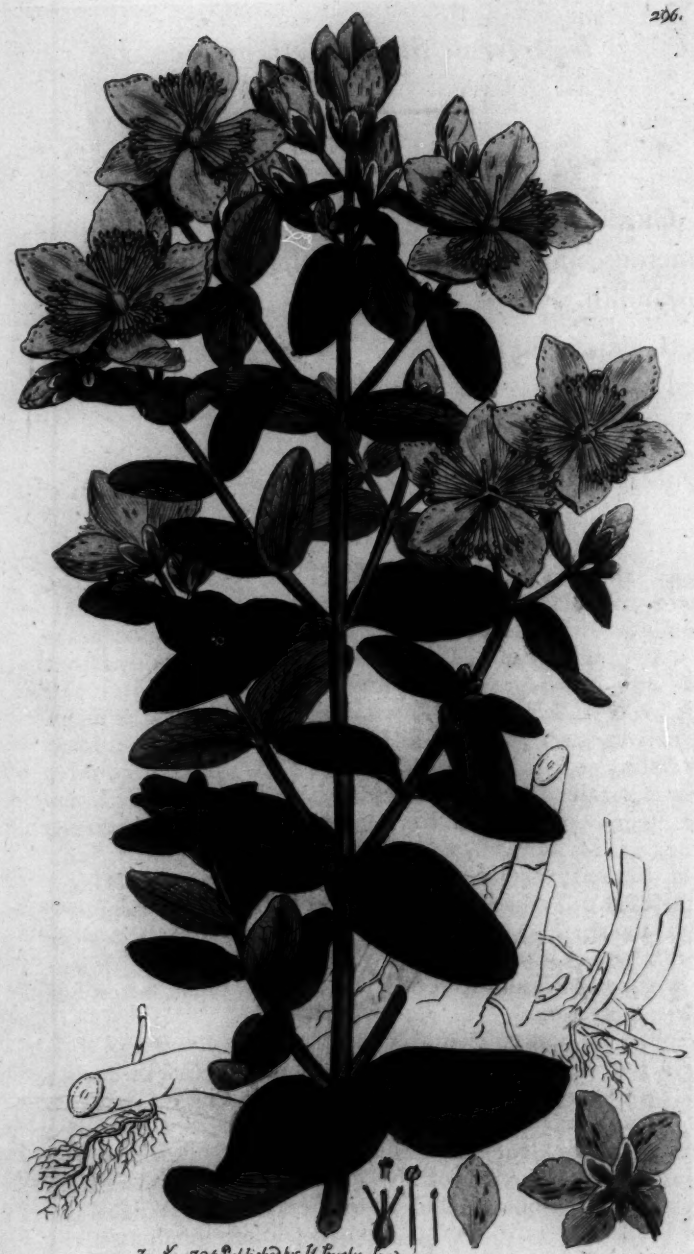
SYN. Hypericum perforatum. *Linn. Sp. Pl.* 1105, *Hudſ. Fl. An.* 333. *With. Bot. Arr.* 813. *Relh. Cant.* 288. *Sibth. Ox.* 234. *Curt. Lond. Faſc.* 1, *t.* 57. *Woodv. Med. Bot.* 29. *t.* 10.

Hypericum. *Raii Syn.* 342.

AN extremely common plant in groves, thickets, and under hedges, flowering about July and Auguſt.

Its woody creeping perennial roots make it very difficult to be extirpated. They throw up numerous ſtems, about two feet high, perfectly erect, leafy, roundiſh, but marked with two prominent lines running down from the inſertion of every pair of leaves, which render the ſtem two-edged. Leaves oppoſite, each pair croſſing thoſe below them, oblong, ſomewhat elliptical, bluntiſh, entire, with one main rib and ſeveral ſtraight veins ſpringing from it, paler and ſomewhat glaucous beneath, ſprinkled with numerous green pellucid dots, eaſily ſeen when held againſt the light, and marked beſides with a few dark purple opaque dots, eſpecially on the margin. A ſhort ſimple leafy branch ariſes from the boſom of each leaf, the upper ones bearing flowers, and forming a forked leafy panicle terminating the ſtem. The flowers are bright yellow, and not inelegant. Calyx-leaves lanceolate, pointed, entire. Petals entire at one edge, crenate at the other. Antheræ tipped with a dark purple gland. Stigmas whitiſh in our ſpecimens, though by ſome writers deſcribed as crimſon. The edges of the calyx and petals, as well as their external ſurface, are marked with dark purple ſpots and lines, containing a red eſſential oil ſoluble in ſpirits, but the aromatic qualities of the herb appear not to be confined to theſe ſpots.

G.R. III.
BRITISH MUSEUM



Jan.y 1. 1796 Published by Jn.o Sowerby London

HYPERICUM dubium.

Imperforate St. John's Wort.

POLYADELPHIA Polyandria.

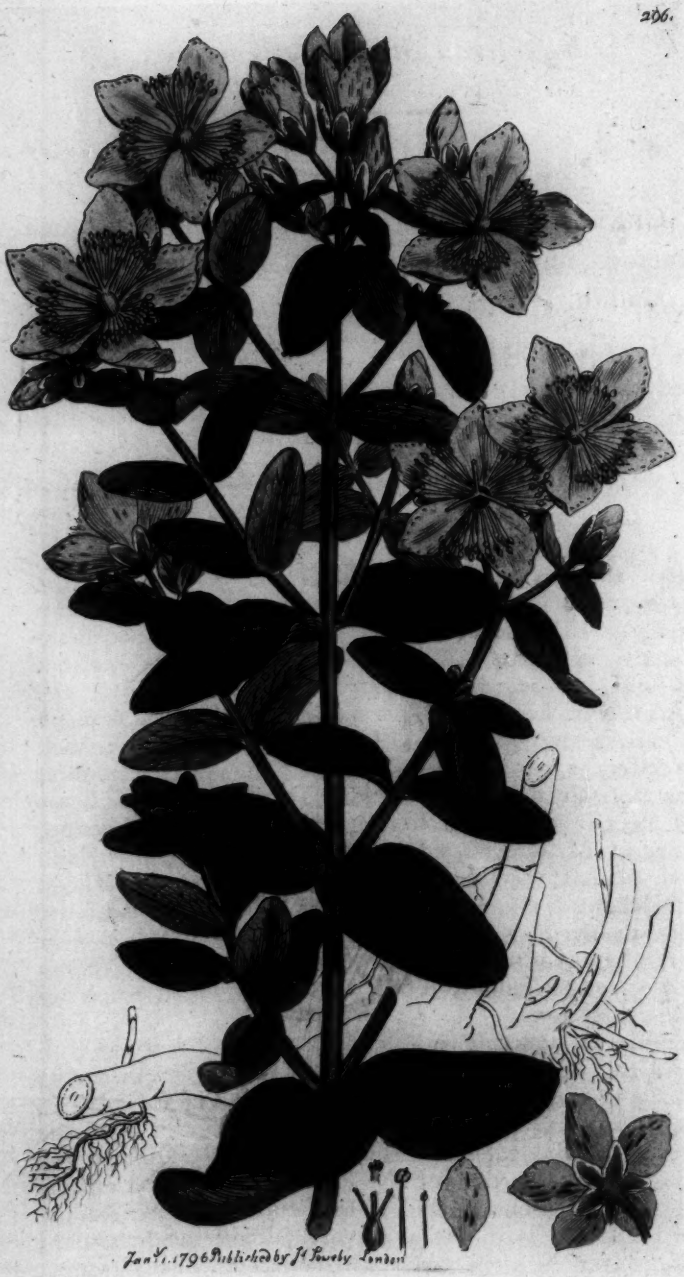
GEN. CHAR. *Cal.* 5-cleft. *Petals* 5. *Filaments* numerous, united at the baſe into 3 or 5 ſets. *Capſule* roundiſh.

SPEC. CHAR. Styles three. Stem obſoletely four-edged. Leaves obtuſe, deſtitute of pellucid dots. Calyx-leaves elliptical.

SYN. Hypericum dubium. *Leers Fl. Herborn.* 165.

THAT this is a moſt diſtinct ſpecies of *Hypericum* from the *perforatum* and all others there can be no doubt, though it ſeems to have eſcaped the notice of every author except the accurate Leers, not being mentioned even as a variety by any other that we can find. Neither is it, as Leers was induced to ſuſpect, the H. *perfoliatum* of Linnæus. This addition to our catalogue of Britiſh natives was diſcovered in July 1794 by Dr. John Seward of Worceſter, growing plentifully about Sapey in that county, and was aſcertained by the Rev. Mr. Douglas to be the H. *dubium* of Leers. Dr. Smith has received it from Switzerland, by favour of Mr. Davall, under the ſame denomination, and found it himſelf very abundantly laſt Auguſt about Colonel Johnes's delightful and romantic place at Hafod, Cardiganſhire, as well as in Mr. Knight's fine woods at Downton Caſtle near Ludlow, where it is much more common than the *perforatum*. It may perhaps be found in other parts of our iſland when accurately ſought for.

In habit, ſize, and colour, this plant very nearly agrees with the *perforatum*, but differs eſſentially from that ſpecies in having no pellucid dots apparent on the leaves, and in the calyx-leaves being elliptical and obtuſe. The latter indeed, and even the bracteæ, are ſprinkled with pellucid dots and lines, and the petals, as well as the edges of the leaves, marked with opaque purple, as in that; but in addition to the above differences, the ſtem of H. *dubium* is in the upper part almoſt quadrangular; and it may even be known before it comes out of the ground, by the much more vivid red of the young ſhoots.



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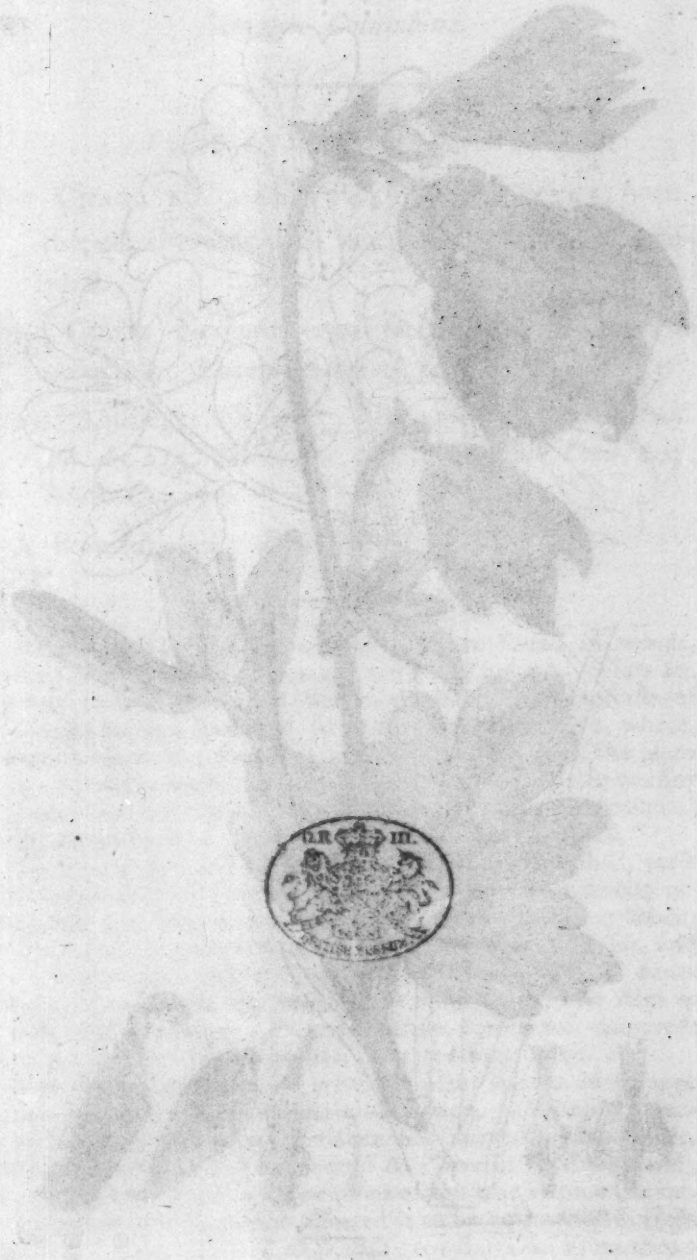

G.R. III.

Jan.ʸ 1, 1796 Published by J.ᵗ Sowerby, London.

AQUILEGIA vulgaris.

Common Columbine.

POLYANDRIA Pentagynia.

GEN. CHAR. *Cal.* none. *Petals* 5. *Nectaries* 5, horn-ſhaped, alternate with the petals. *Capſules* 5, diſtinct.

SPEC. CHAR. Nectaries equal to the petals; their horns incurved. Leaves and ſtem ſmooth.

SYN. Aquilegia vulgaris. *Linn. Sp. Pl.* 752. *Hudſ. Fl. An.* 235. *With. Bot. Arr.* 562. *Relh. Cant.* 207. *Sibth. Ox.* 169.

A. flore ſimplici. *Raii Syn.* 273.

COLUMBINES in a wild ſtate are found in woods, thickets, and paſtures in ſeveral parts of England. They are not rare in Derbyſhire and Weſtmoreland. Mr. Wagſtaffe of Norwich ſent us a ſpecimen from that neighbourhood, where, eſpecially about the meadows at St. Faith's Newton, the plant grows perfectly wild, flowering in June. From its frequency in gardens, it ſometimes occurs (of various forms and colours) about dunghills, but is ſeldom permanent in ſuch places.

The root is perennial. Stem not very leafy, branched, each branch bearing a ſolitary drooping flower. Leaves moſtly radical, on very long foot-ſtalks, twice ternate, obtuſely lobed, glaucous beneath, ſmooth; thoſe on the ſtem nearly ſeſſile, and more ſimple, the uppermoſt conſiſting of 3 entire and acute leaflets. Sometimes the ſtem bears only ſuch. The ſtem is purpliſh and glaucous. Flowers purple, rarely roſe-coloured. Germens inveſted with a plaited lacerated membrane.

In mountainous ſituations what the plant loſes in luxuriance it gains in neatneſs and elegance of foliage, and then the nectaries are ſometimes found rather leſs curved. Hence Mr. Hudſon thought he had diſcovered A. *alpina* in Weſtmoreland; but on ſeeing Dr. Smith's ſpecimens of the true Alpine Columbine from Mount Cenis, he allowed it to be quite diſtinct from any thing he had obſerved of Britiſh growth. Our Flora therefore can properly boaſt but one ſpecies of this genus.

AQUILEGIA vulgaris.

Common Columbine.

Jan.ʸ 1. 1796 Published by Jᵗ Peverley London.

CRATÆGUS torminalis.

Wild Service Tree.

ICOSANDRIA Digynia.

GEN. CHAR. *Cal.* in 5 ſegments. *Petals* 5. *Berry* inferior, with 2 ſeeds.

SPEC. CHAR. Leaves ſomewhat heart-ſhaped, ſerrated, ſeven-lobed; the lower lobes divaricating.

SYN. Cratægus torminalis. *Linn. Sp. Pl.* 681. *Hudſ. Fl. An.* 214. *With. Bot. Arr.* 511. *Sibth. Ox.* 156.

Meſpilus Apii folio ſylveſtris non ſpinoſa, ſcu Sorbus torminalis. *Raii Syn.* 453.

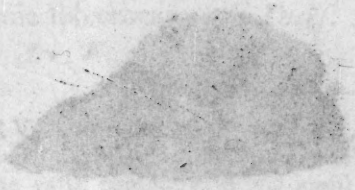
THIS tree is moſt frequent in the north-weſt and midland counties, though alſo found here and there in Eſſex, Suffolk, and Norfolk. We received it wild from Mr. Woodward.

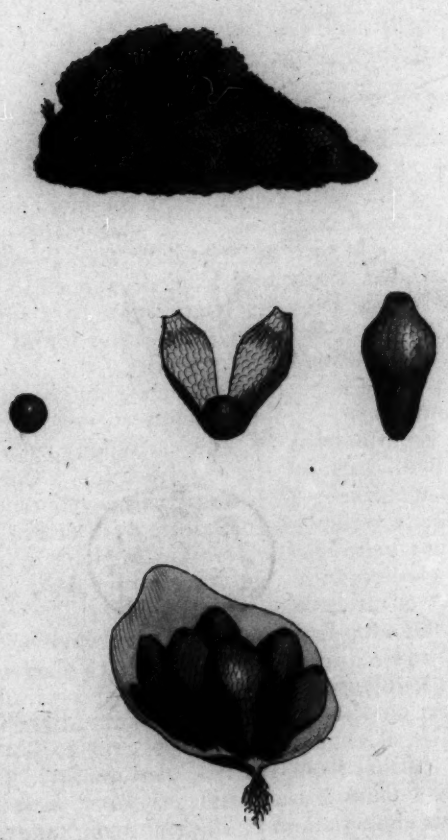
It is of conſiderable ſize, but of ſlow growth, and the wood is conſequently hard. The bark is ſmooth and aſh-coloured. Young branches green and ſlightly downy, clothed with alternate handſome ſmooth leaves, of a firm not ſucculent ſubſtance, always more or leſs accurately 7-lobed, reticulated with ſmall veins, ſerrated, deciduous. Flowers numerous, in large terminal cymoſe panicles, appearing early in May; their flower-ſtalks and calyx downy; petals cream-coloured; ſtyles 3, 4, or 5, and the ſeeds in proportion, an inſtance (among many others) how very ill-founded the orders and genera are of Linnæus's *Icoſandria Digynia*, *Trigynia*, and *Pentagynia*, as Haller and his diſciples long ago contended.

The fruit of this tree ripens late in autumn, and forms panicles of brown punctated berries, larger than thoſe of the Hawthorn, which, when the froſt has touched them, are of an exceedingly pleaſant acid flavour, and are ſometimes ſold in the London fruit-ſhops. They are eſteemed ſtrengthening to the ſtomach and bowels. Old Tragus, whoſe figures and their accompaniments ſometimes expreſs the virtues of plants with more truth than decorum, gives a ludicrous exhibition of two little boys under this kind of Service tree, p. 1010, in order to illuſtrate its (apparently very powerful) effects in expelling worms.

CRATÆGUS torminalis.

Wild Service Tree.





Jan.y 1. 1796 Published by Sr. Swerby London.

SPHÆROCARPUS terreſtris.

Reticulated Sphærocarpus.

CRYPTOGAMIA Algæ.

GEN. CHAR. *Cal.* ventricoſe, undivided. *Seeds* very numerous, collected into a globe.

SPEC. CHAR. . . . .

SYN. Sphærocarpus terreſtris, minima. *Mich. Gen.* 4. *t.* 3. *Dill. Muſc.* 536. *t.* 78. *f.* 17.

Targionia ſphærocarpus. *Dickſ. Faſc.* 1. 8. *With. Bot. Arr. V.* 3. 157.

OBSERVED by the Rev. Mr. Bryant, Mr. Crowe, and Mr. Woodward, in clover, turnep, and other fields in Norfolk, covering the earth copiouſly in the moiſt winter months, particularly on ſtrong land. A certain glaucous hue diſtinguiſhes it at firſt ſight to thoſe who have ſeen it once, though its minuteneſs and figure may have occaſioned its remaining ſo long undiſcovered, from its reſemblance to a ſmall *Bryum* without fructification. Even Dillenius never found this plant, but has taken it up on Micheli's authority.

The whole habit is very delicate and membranous, of a pale glaucous green. Fronds in cluſters, nearly horizontal, attached to the ground by ſhort radicles, oblong, waved, their diſk covered with tufts of the fructification. Calyx of an inverted pear-ſhape, like a little bottle or vinegar cruet, erect, pellucid, of a finely reticulated ſtructure; its orifice contracted and a little notched. Seeds forming a globe in the bottom of the calyx, clothed with a fine tranſparent ſkin, and, as Micheli obſerves, not intermixed with any fibres.

Mr. Dickſon firſt made this plant known to the Engliſh botaniſt, and reduced it to the genus of *Targionia*. We are very loath to diſſent from our great Cryptogamiſt, but on mature deliberation think it ſafeſt to retain Micheli's original genus, the eſſential character being ſo very clear, and the habit ſo totally diſtinct from the true *Targionia* (ſee our t. 287), which is of the ſame natural tribe as *Marchantia*; whereas *Sphærocarpus* is cloſely allied to *Blaſia* in habit, and not far remote in generic character. As to the name, we retain it on the ground of originality, though writers on Fungi have applied it to ſome genus of their own, and Gmelin in his heedleſs compilations has called a plant in Monandria *Sphærocarpus*. It is beſt never to apply any old name (though laid aſide) to a new genus; but the ſound principles of nomenclature have of late been too much ſlighted.

SPHAEROCARPUS terrestris.

Reticulated Sphaerocarpus.

CRYPTOGAMIA Algæ.

Gen. Char. Vesicæ ventricosæ, tradividæ. Seeds very numerous, collected into a globe.

Spec. Char. . . . .

Syn. Sphaerocarpus terrestris, minimus. Mich. Gen. 4. N. 3. Dill. Musc. 539. t. 78. f. 17.

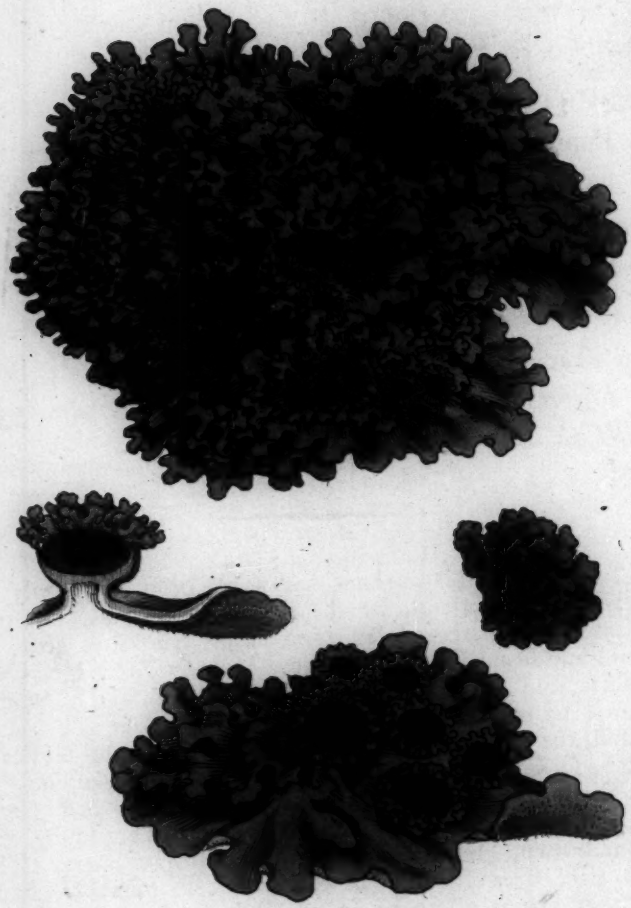
Targionia sphaerocarpos. Dicks. Pl. r. 8. Willd. Hort. Kew. V. 3. 1797.

OBSERVED by Mr. Rev. Mr. Dillwyn, Mr. Crowe, and Mr. Woodward, together with many other fields in Norfolk, covering the earth copiously in the moist winter months, particularly on strong land. A certain glaucous hue diffinguishes it at first sight to thole who have leen it once, though its minuteness and figure may have occasioned its remaining so long undiscovered. From its refemblance to a Lunaria when in fructification. Even Micheli never found this plant, but has taken it up on Micheli's authority.

The whole habit is very delicate and evanescent, of a pale glaucous green. Fronds scattered nearly horizontal, attached to the ground by short fibres, oblong, waved, their disk covered with pairs of the fructification. Calyx of an inverted pear-shape, like a little bottle or vinegar cruet, pellucid, of a finely reticulated structure; its orifice contracted and a little recked. Seeds roundish, a pistle in the bottom of the calyx, clothed with a fine transparent skin, and, as Micheli observes, not intermixed with any fibres.

Mr. Dickson first found this plant known to the English botanift, and reduced it to the genus of Targionia. We are very loath to differ from our great Cryptogamift, but on mature deliberation think it right to return Micheli's original genus, the essential character of which is very clear, and the habit totally diftinct from the true Targionia (see tab. 289), which in of the same natural tribe as Marchantia, whereas Sphaerocarpus is closely allied to Riccia in habit, and not far remote in generic character. As to the name, we retain it on the ground of originality, though writers on Fungi have applied it to some genus of their own, and Gmelin in his heedless compilations has called a plant in Monandria Sphaerostemon. It is best never to apply any old name (though laid aside) to a new genus; for the found principles of nomenclature have of late been too much slighted.

G.R.
III.



Jan.y 1.1796 Published by Jn. Sowerby London.

LICHEN Burgeſſii.

Crowned Lichen.

CRYPTOGAMIA Algæ.

GEN. CHAR. Male, ſcattered warts.
Female, ſmooth ſhields or tubercles, in which the ſeeds are imbedded.

SPEC. CHAR. Leafy, ſomewhat imbricated, curled. Shields elevated, brown, ſlightly concave, with a green, leafy, curled and ſinuated border.

SYN. Lichen Burgeſſii. *Linn. Syſt. Veg. ed.* 13. 807. *Lightf. Scot.* 827. *t.* 26. *Hudſ. Fl. An.* 538. *With. Bot. Arr. V.* 3. 189.

HITHERTO this curious *Lichen* has been found only in Dumfrieſſhire, Scotland, by the Rev. Dr. Burgeſs, but our ſpecimens were gathered laſt ſummer on trunks of trees in the wild and beautiful country about the Devil's bridge, Cardiganſhire, and at Hafod in that neighbourhood, by Dr. Smith. It grows, by no means copiouſly, in patches about as broad as the hand, the fronds being lobed, ſinuated, curled and cluſtered together, ſo as to elevate one another into a thick cuſhion-like tuft; their ſubſtance is thin and pellucid, of a dull green, ſmooth above, finely downy beneath, when dry becoming of a purpliſh brown, and the under ſide whitiſh or hoary. The ſhields ariſe from the diſk of the frond, in tolerable plenty when they are at all to be found, and the frond protruding with them makes them ſeem pedunculated, though they are really ſeſſile; their diſk is ſlightly concave, ſmooth, red brown, with a narrow, ſcarcely perceptible, border of its own ſubſtance and colour, and the whole encloſed in a luxuriant curled leafy elevated margin of the colour and texture of the frond.

Mr. Lightfoot deſcribes the ſhields as, when wet, of the ſame colour with the leaves; whereas they are of a rather brighter brown in that ſtate than when dry. Indeed his whole deſcription is not made with all that attention which ſo new and ſingular an object deſerved.

Feb.1 1796 Published by J.t Sowerby London.

SOLIDAGO Virgaurea.

Common Golden-rod.

SYNGENESIA Polygamia-ſuperflua.

GEN. CHAR. *Receptacle* naked. *Down* ſimple. *Ligulate florets* about 5. *Calyx-ſcales* imbricated, cloſed.

SPEC. CHAR. Stem ſlightly zigzag, angular. Flower-cluſters panicled, upright, crowded.

SYN. Solidago Virgaurea. *Linn. Sp. Pl.* 1235. *Hudſ. Fl. An.* 367. *With. Bot. Arr.* 917. *Relh. Cant.* 318. *Sibth. Ox.* 254.

Virga aurea. *Raii Syn.* 176.

IN woods, copſes, and among furze upon heathy ground not unfrequent, flowering from July to September.

Root perennial, of long ſimple fibres. Stem very various in height, from 10 inches to 3 feet, curved below, then erect, leafy, very ſlightly zigzag, angular and ſtriated, rough, a little downy. Leaves harſh, clothed with ſhort rigid down, paler beneath, on winged footſtalks; the radical ones obovate, or at leaſt very broadly lanceolate, ſerrated, or rather crenate; thoſe on the ſtem alternate, narrower and more entire. Flowers yellow, in terminal and axillary erect cluſters, forming a denſe panicle, which varies extremely as to luxuriance and number of flowers. Bracteæ lanceolate, downy. Calyx-ſcales with a membranous border, downy. Rays of the flower from 5 to 9 or 10. Seed-down rough when magnified. The herb bruiſed ſmells like wild carrot. It has been eſteemed a vulnerary, and is recommended to be taken internally as well as applied to the wound. As a tonic it may ſtrengthen the general habit of body, and by that means be of uſe.

Some botaniſts have ſuſpected our golden-rod to be different from the S. *Virgaurea* of Linnæus, but on a careful compariſon of ſpecimens we find them preciſely the ſame.

G.R. III.

Feb.y 1796 Published by P. Sowerby, London

CAMPANULA latifolia.

Giant Bell-flower.

PENTANDRIA Monogynia.

GEN. CHAR. *Cor.* bell-ſhaped, cloſed at the bottom by valves bearing the ſtamina. *Stigma* 3-cleft. *Capſ.* inferior, opening by lateral pores.

SPEC. CHAR. Leaves ovato-lanceolate. Stem unbranched, round. Flowers ſolitary, pedunculated. Fruit drooping.

SYN. Campanula latifolia. *Linn. Sp. Pl.* 233. *Hudſ. Fl. An.* 96. *With. Bot. Arr.* 218. *Relh. Cant. Suppl.* 2. 10. *Lightf. Scot.* 141.

C. maxima foliis latiſſimis. *Raii Syn.* 276.

IN the north of England, and in Scotland according to Mr. Lightfoot, this ſpecies of *Campanula* is not unfrequent, though rare in the ſouthern counties. It grows in ſhady moiſt places, about the baſes of mountains. Mr. Roſe obſerved it in Forehoe wood near Kimberley, Norfolk. Our wild ſpecimen grew near Dunſtable, where it was firſt remarked and aſcertained by our obliging correſpondent the Rev. Mr. Abbot, for many botaniſts overlook this plant for C. *Trachelium*.

Root perennial, very milky as well as the whole herb. Stem 3 or 4 feet high, erect, ſimple, cylindrical or very ſlightly angular, leafy. Leaves alternate, nearly ſeſſile, large, roughiſh, paler beneath, doubly ſerrated. From the boſoms of the upper ones ariſe ſolitary naked flower-ſtalks, ſcarcely ever bearing more than one flower; we have not found the pair of "leaf-ſcales," or rather bracteæ mentioned in the Bot. Arr. Calyx ſmooth, ſerrated. Corolla large and handſome. The antheræ are not large, but afford plenty of pollen, which copiouſly adheres to the ſtyle.

This is ſometimes cultivated in gardens. It flowers in Auguſt, and is rather ornamental; occaſionally varying to white or pale roſe-colour.

CAMPANULA latifolia.

Giant Bell-flower.

GEN. CHAR. Cor. bell-shaped, cleaved at the bottom by valves bearing the stamina. Stigma 3-cleft. Cap. inferior, opening by lateral pores.

SPEC. CHAR. Leaves ovate-lanceolate, stem unbranched, round. Flowers solitary, pedunculated. Fruit drooping.

SYN. Campanula latifolia. Linn. Sp. Pl. 233. Hoffm. Pl. Alp. 96. With. Bot. Arr. 318. Hoffm. Comp. Suppl. 10. Lightf. 130. Fl. Dan. 996.

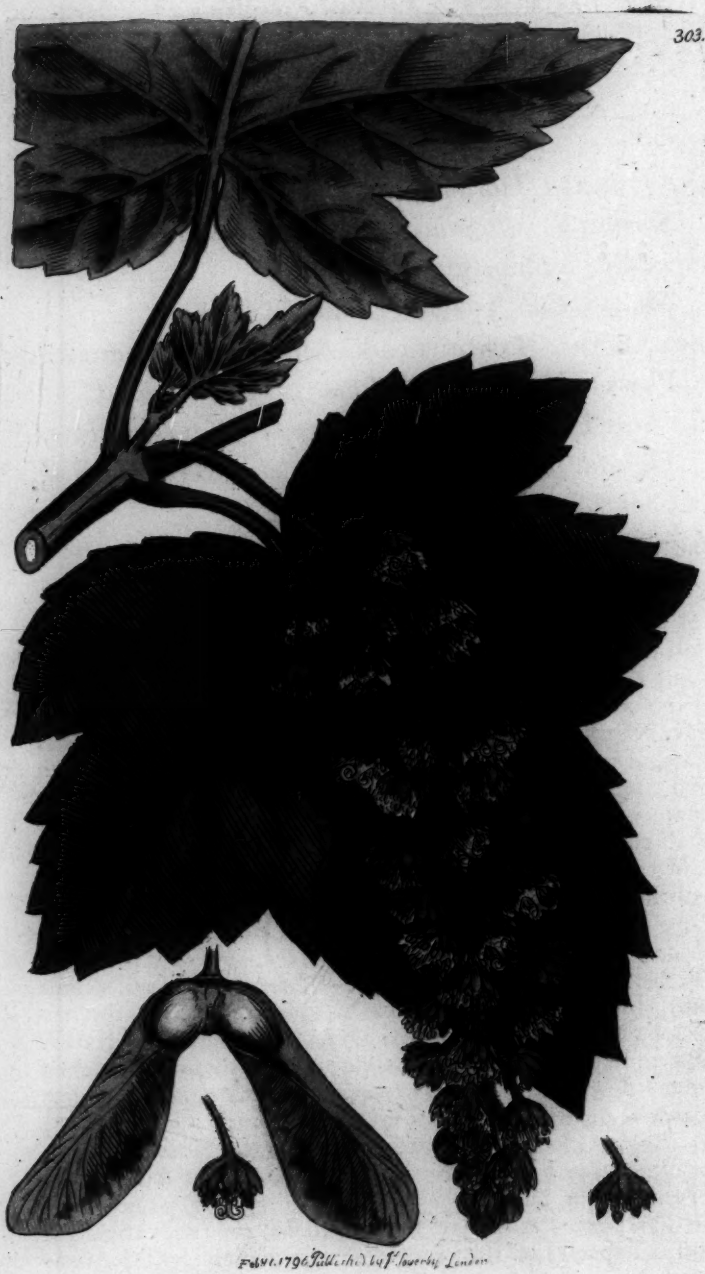
C. maxima folio latiori. Bauh. Pin. 93.

IN the north of England and in Scotland according to Mr. Lightfoot, this species of Campanula is not unfrequent, though rare in the southern counties. It grows in many moist places, about the lakes of Westmoreland. In Flora Scotica it is found in Perthshire wood near Kinfauns, plentifully. Our valid specimen grew near Dunkeld, where it was first remarked and ascertained by our obliging correspondent the Rev. Mr. Tudor, for many botanists overlook this plant for C. Trachelium.

Root perennial, very milky as well as the whole herb. Stem 3 or 4 feet high, erect, simple, cylindrical or very slightly angular, leafy. Leaves alternate, nearly sessile, large, roughish, paler beneath, doubly serrated. From the bosoms of the upper ones arise solitary naked flow'r-stalks, scarcely ever bearing more than one flower; we have not found the pair of "leaf-like," or rather bracteæ mentioned in the Fl. Brit. Calyx smooth, serrated. Corolla large and handsome. The antheræ are not large, but abound plenty of pollen, which copiously adheres to the style.

This is sometimes cultivated in gardens. It flowers in August, and is rather ornamental, occasionally varying to white or pale sulphur-colour.

G.R.
III.



Feb.1.1796. Published by J. Sowerby, London

ACER Pſeudo-Platanus.

Greater Maple, or Sycamore.

POLYGAMIA Monœcia.

GEN. CHAR. Hermaphr. *Cal.* 5-cleft. *Petals* 5. *Stamina* 8. *Piſtillum* 1. *Capſules* 2 or 3, ſingle-ſeeded, terminating in a wing.

Male. *Cal.* 5-cleft. *Pet.* 5. *Stam.* 8.

SPEC. CHAR. Leaves five-lobed, unequally ſerrated. Flowers in pendent cluſters.

SYN. Acer Pſeudo-Platanus. *Linn. Sp. Pl.* 1495. *Hudſ. Fl. An.* 445. *With. Bot. Arr.* 1147. *Relh. Cant.* 380. *Sibth. Ox.* 127.

A. majus. *Raii Syn.* 470.

RAY thinks this tree, ſo common in hedges, &c. about houſes, is not really a native of Britain. We have not obſerved it in any very wild places. It is ſaid to prefer a maritime ſituation and expoſure, but will grow even in a mountainous one. Being a large, very handſome, quick growing tree, and not injurious to graſs, it was much planted about houſes formerly, though Evelyn complains that the leaves fall early, putrefy, and "contaminate and mar our walks," ſo that he would "baniſh it from all curious gardens and avenues." The wood, as in all trees of rapid growth, is ſoft, chiefly uſed for ordinary utenſils. Dr. Withering ſays ſugar may be obtained from the ſap, which is more remarkably the caſe with the *Acer ſaccharinum* of America.

The bark is ſmooth, aſh-coloured. Branches round. Buds oppoſite, formed of numerous ſcales. Leaves 5-lobed, the terminal lobe largeſt, all veined ſtrongly, and unequally ſerrated. Stipulæ none. Cluſters ſolitary, axillary, long, drooping, branched and many-flowered. Flowers drooping. Petals green, very like the calyx-ſegments in ſize, form, and colour. Germen very hairy. Stigma cloven, revolute. Fruit pendent, ſmooth; ſeed-wings often 3, not much divaricated. It ripens in Auguſt, the flowers appearing in May.

We have great reaſon to ſuſpect there are two varieties if not diſtinct ſpecies of this tree, in one of which the leaves are glaucous beneath and their ſerratures very diſtant; the filaments of this are hairy. Our intelligent friend Andrew Caldwell, Eſq. of Dublin, firſt ſuggeſted the idea of this difference, and the Linnæan herbarium confirms his ſuſpicion.

G.R. III.

Sept 1. 1796 Published by J. Sowerby

ACER campeſtre.

Common Maple.

POLYGAMIA Monœcia.

GEN. CHAR. Hermaphr. *Cal.* 5-cleft. *Pet.* 5. *Stam.* 8. *Piſt.* 1. *Capſ.* 2 or 3, ſingle-ſeeded, terminating in a wing.
Male. *Cal.* 5-cleft. *Pet.* 5. *Stam.* 8.

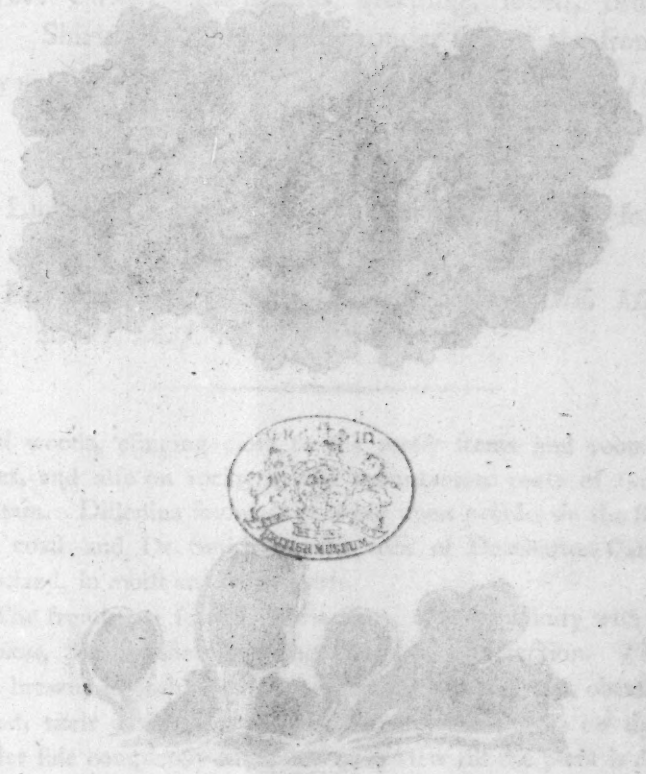
SPEC. CHAR. Lobes of the leaves obtuſe, notched. Flowers in upright cluſters.

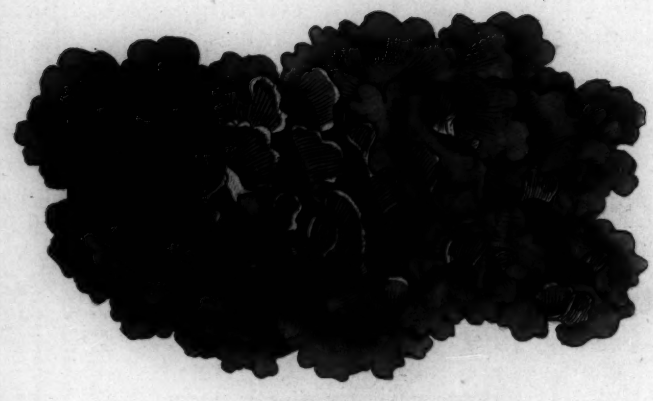
SYN. Acer campeſtre. *Linn. Sp. Pl.* 1497. *Hudſ. Fl. An.* 445. *With. Bot. Arr.* 1148. *Relh. Cant.* 380. *Sibth. Ox.* 127.
A. minus. *Raii Syn.* 470.

NOT rare in hedges and thickets in the ſouthern counties, though ſeldom found in the northern ones or in Scotland.

It is a ſmall tree, with ſpreading divaricated round oppoſite branches, their bark ſmooth, though that of the ſtem is full of corky fiſſures. Footſtalks downy as well as the leaves, which are ſmaller than in moſt of our trees, oppoſite, 5-lobed, each lobe having one or two notches. Stipulæ none. Cluſters of flowers appearing in May or June, erect, terminal, branched. Flowers green, much like thoſe of the preceding. Their antheræ (as in that) are hairy between the lobes. Capſules downy, extremely divaricated; wings ſmooth.

The wood is very uſeful for turners, being compact, of a fine grain, and often beautifully veined. The ancient Romans are ſaid to have ſet an exorbitant value upon their tables of maple-wood, according to their ſize and the beauty of their veins. See Evelyn's *Sylva*.





Feb.ʸ 1.ˢᵗ 1796 Published by J.ᵗ Sowerby London.

LICHEN reſupinatus.

Reverſed Lichen.

CRYPTOGAMIA Algæ.

GEN. CHAR. Male, ſcattered warts. Female, ſmooth ſhields or tubercles, in which the ſeeds are imbedded.

SPEC. CHAR. Coriaceous, creeping, lobed, brown. Shields marginal, on the under ſide of the frond.

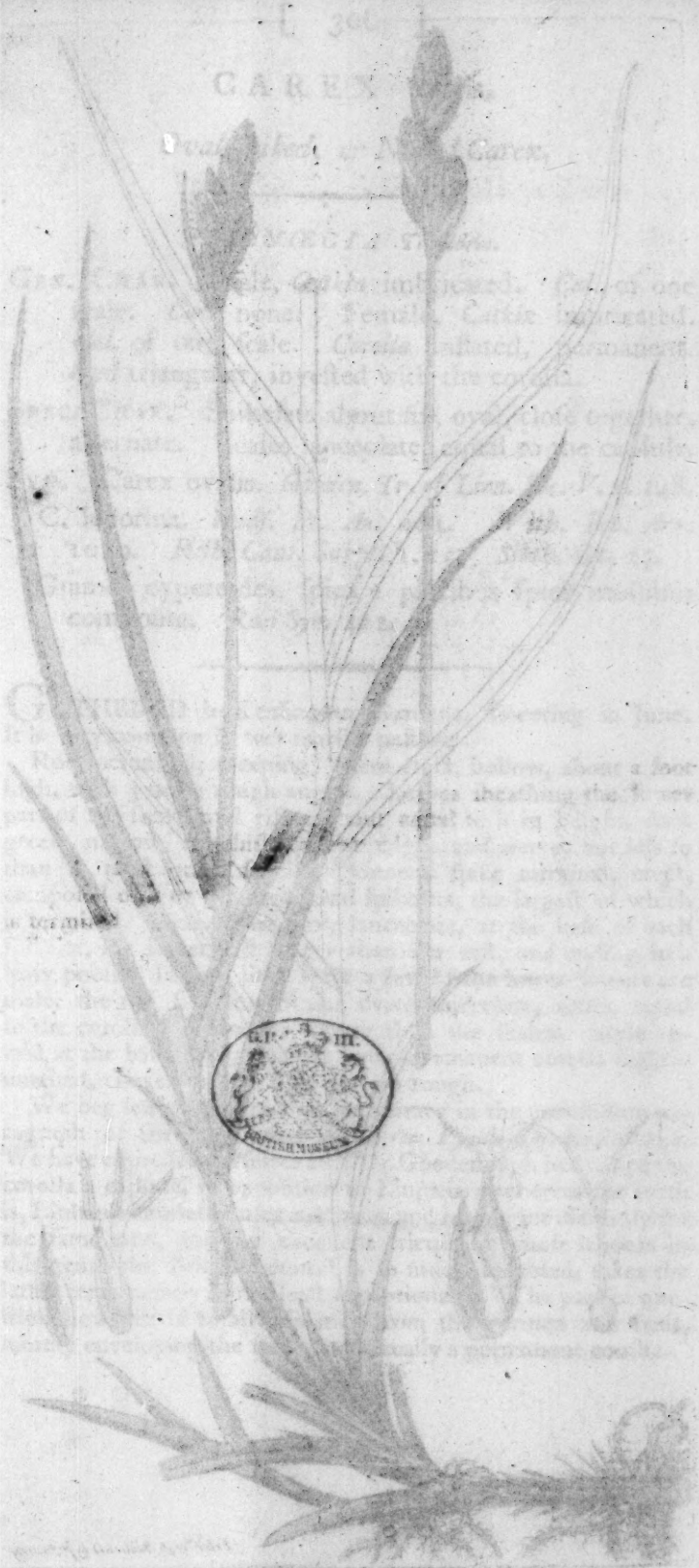
SYN. Lichen reſupinatus. *Linn. Sp. Pl.* 1615. *Hudſ. Fl. An.* 545. *Lightf. Scot.* 843. *With. Bot. Arr. V.* 3. 205.

Lichenoides ſaxatile fuſcum, peltis in averſa foliorum ſuperficie locatis. *Raii Syn.* 77.

L. fuſcum, peltis poſticis ferrugineis. *Dill. Muſc.* 206. *t.* 28. *f.* 105.

IN woods, clinging cloſe to the moſſy ſtems and roots of trees, and alſo on rocks, in the mountainous parts of Great Britain. Dillenius found it growing upon pebbles on the Suſſex coaſt, and Dr. Smith on the rock of Dumbarton Caſtle, Scotland, in moiſt and ſhady parts.

The fronds are ſcarcely coriaceous, only its affinity with L. *caninus*, &c. juſtifies its being placed in that ſection. They are brown, ſmooth, ſomewhat imbricated, horizontal, obtuſely lobed, their extremities dilated, bearing the ſhields on their under ſide completely concealed from view till the plant is dried up by any means, and then thoſe ſhield-bearing lobes are reflexed. The diſk of the ſhield is roundiſh, irregular in ſhape and various in ſize, concave, tawny or brick-coloured; they become darker in drying, though the colour of the frond is ſcarcely changed.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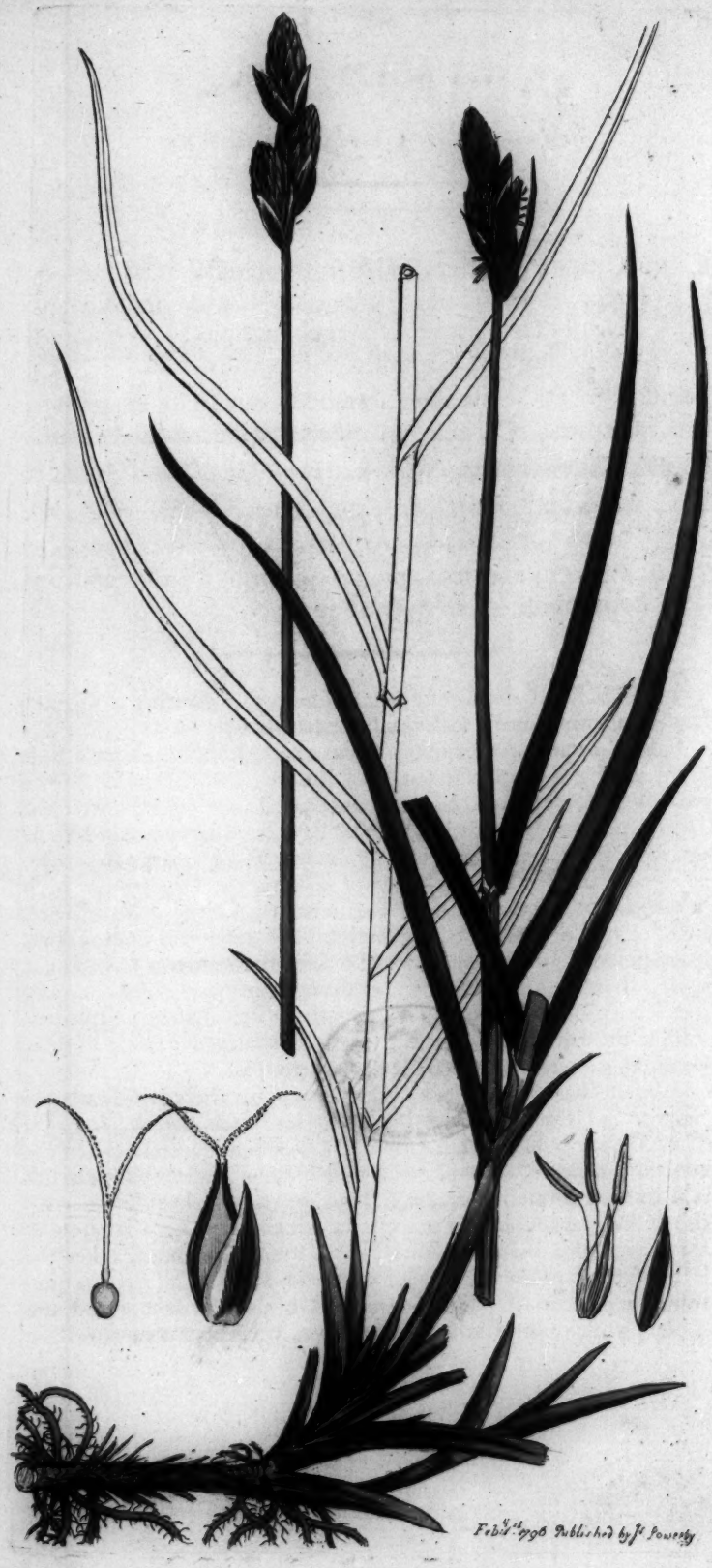


Febry 1st 1796 Published by Jas Sowerby

CAREX ovalis.

Oval-ſpiked, or Naked Carex.

MONŒCIA Triandria.

GEN. CHAR. Male, *Catkin* imbricated. *Cal.* of one ſcale. *Cor.* none. Female, *Catkin* imbricated. *Cal.* of one ſcale. *Corolla* inflated, permanent. *Seed* triangular, inveſted with the corolla.

SPEC. CHAR. Spikelets about ſix, oval, cloſe together, alternate. Scales lanceolate, equal to the capſule.

SYN. Carex ovalis. *Gooden. Tr. of Linn. Soc. V.* 2. 148.

C. leporina. *Hudſ. Fl. An.* 404. *With. Bot. Arr.* 1029. *Relh. Cant. Suppl.* 1. 15. *Sibth. Ox.* 27.

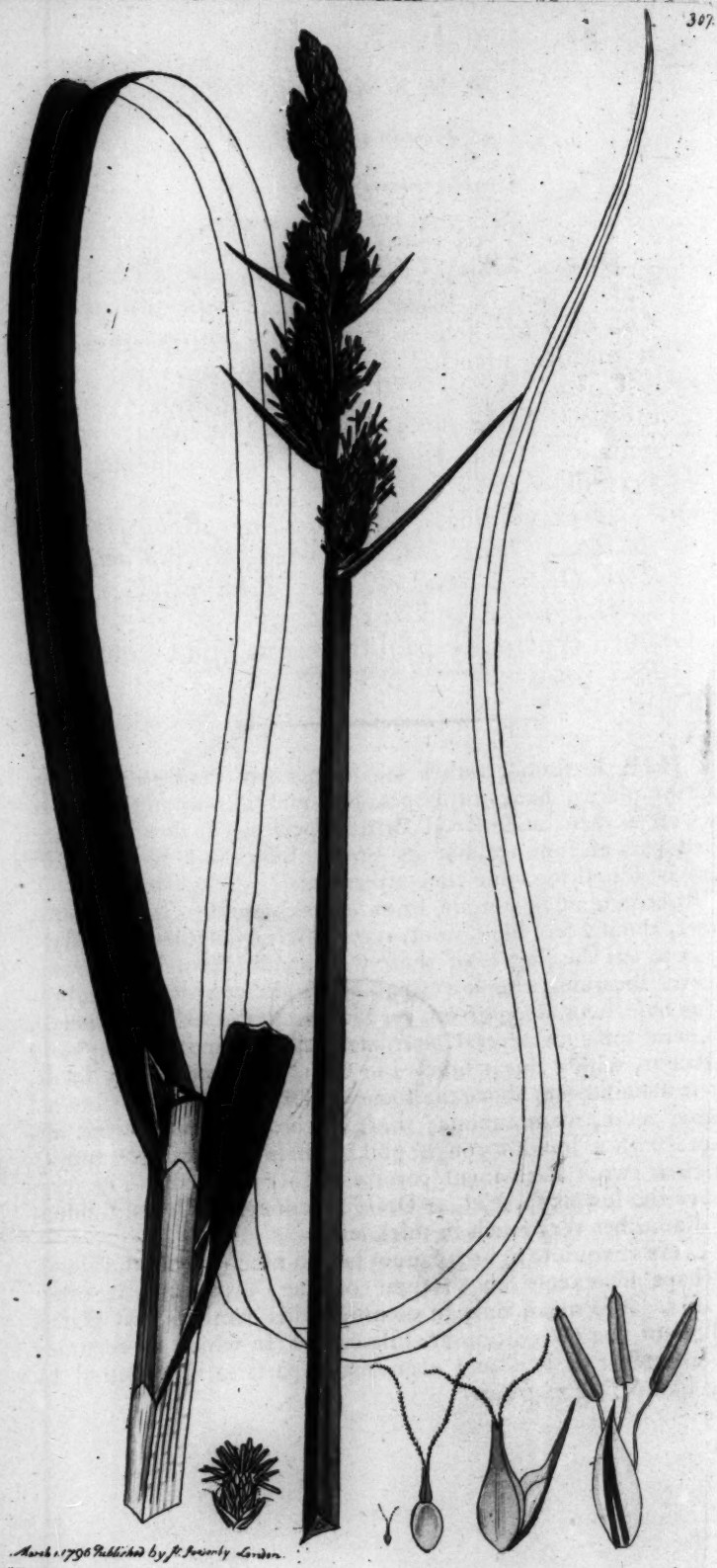
Gramen cyperoides, ſpica e pluribus ſpicis mollibus compoſita. *Raii Syn.* 422.

GATHERED in Kenſington Gardens, flowering in June. It is very common in wet marſhy paſtures.

Root perennial, creeping? Stem erect, hollow, about a foot high, with 3 ſharp rough angles. Leaves ſheathing the lower part of the ſtem, and riſing about equal to it in height, dark green, narrow, roughiſh on the edges and nerve, but leſs ſo than in moſt other ſpecies. General ſpike terminal, erect, compoſed of 5 or 6 upright oval ſpikelets, the largeſt of which is terminal. Bracteæ ſolitary, lanceolate, at the baſe of each ſpikelet, the lowermoſt longer than the reſt, and ending in a leafy point. In each little ſpike a few of the lower flowers are male, the reſt female. Scales ovato-lanceolate, acute, equal to the corolla. Filaments longer than the ſcales. Style tumid at the baſe. Stigmas but two. Permanent corolla ſlightly notched, convex on one ſide, margin rough.

We beg leave to correct an inaccuracy in the concluding paragraph of the deſcription of *Carex Pſeudo-Cyperus*, *t.* 242. We have expreſſed ourſelves as if Dr. Goodenough had called the corolla a capſule, in oppoſition to Linnæus; whereas the truth is, Linnæus careleſsly uſes *nectarium* and *capſula* indifferently for the ſame part, and our excellent friend, to whoſe labours in this genus the Britiſh botaniſt is ſo much indebted, takes the latter term merely as the leaſt exceptionable. The part in queſtion however is totally diſtinct from the germen and fruit, merely enveloping the ſeed, and is really a permanent corolla.

G.R. III.



March 1.1796 Published by J.t. Swinerby London.

CAREX vulpina.

Great Carex.

MONŒCIA Triandria.

GEN. CHAR. Male, *Catkin* imbricated. *Cal.* of one ſcale. *Cor.* none. Female, *Catkin* imbricated. *Cal.* of one ſcale, *Cor.* inflated, permanent. *Seed* triangular, inveſted with the corolla.

SPEC. CHAR. Spike thrice compounded, compact, obtuſe. Male flowers in each ſpikelet above the female. Fruit ſpreading. Angles of the ſtem very ſharp.

SYN. Carex vulpina. *Linn. Sp. Pl.* 1382. *Hudſ. Fl. An.* 404. *With. Bot. Arr.* 1030. *Relh. Cant.* 350. *Sibth. Ox.* 27. *Gooden. Tr. of Linn. Soc. V.* 2. 161. *Leers Herborn.* 196. *t.* 14. *f.* 5.

Gramen cyperoides paluſtre majus, ſpica compacta. *Raii Syn.* 423.

THIS is found, rather leſs frequently than the laſt, in marſhy places, banks of rivers, &c. and is one of the largeſt as well as beſt underſtood Britiſh ſpecies. It flowers in the early part of ſummer, but its brown ſpikes in a ſeeding ſtate may be found for ſome time afterwards.

Root perennial, fibrous, forming thick tufts. Stems many, erect, about 2 feet high, ſtout, very acutely triangular and rough, ſo as to cut the fingers of thoſe who handle them incautiouſly. Leaves ſheathing the lower part with their whitiſh membranous baſe, long, deep green, very rough on the edges and nerve. General ſpike of ſeveral alternate, rather remote, compound ſpikelets, with a linear bractea to each. Little ſpikelets ſmall, their male flowers above the female. Scales of the male flowers ovate, acute, membranous; thoſe of the female ſomewhat abrupt, with a longiſh rough point. Baſe of the ſtyle tumid. Stigmas two. Permanent corolla ſlightly notched. The ſtem above the loweſt ſpikelet, as Dr. Goodenough obſerves, ſuddenly diminiſhes very much in thickneſs.

Leers's exquiſite figures cannot be too much admired, though perhaps he excels leſs in ſome of the *Carices* than in other graſſes. We mean only to commend his own original plates. Thoſe of the 2d edition are vile copies, in which all accuracy of character is loſt, and even many parts totally omitted by the blundering engraver.

G.R. III.

March 1st 1796 Published by J. Sowerby London

ADONIS autumnalis.

Corn Adonis, or Pheaſant's-eye.

POLYANDRIA Polygynia.

GEN. CHAR. *Cal.* 5-leaved. *Petals* 5 or more, without a nectary. *Seeds* naked.

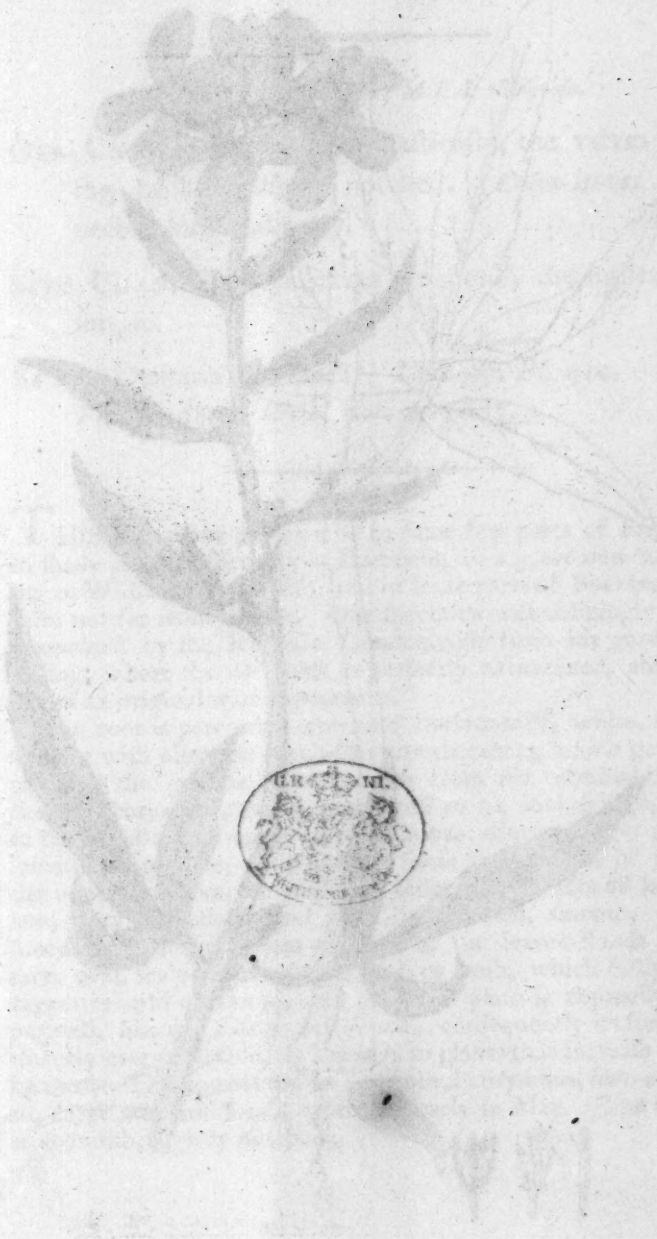
SPEC. CHAR. Petals about eight, obcordate, concave. Fruit ovate.

SYN. Adonis autumnalis. *Linn. Sp. Pl.* 771. *Hudſ. Fl. An.* 239. *With. Bot. Arr.* 570. *Sibth. Ox.* 171. *Curt. Lond. Faſc.* 3. *t.* 37.

Flos Adonis. *Raii Syn.* 251.

FOR a wild ſpecimen of this elegant plant we are obliged to Miſs Lyſons, who gathered it in Glouceſterſhire in October laſt. It grows, though rarely, in corn-fields. Mrs. Pleſtow, of Watlington, in Norfolk, obſerved it near Denver ſluice in that county.

Root ſmall, annual. Stem much branched, upright, leafy, round, ſtriated. Leaves alternate, thrice compound, the ſegments linear, alternate, acute. Flowers ſolitary, terminating the branches, inodorous, of a beautiful poliſhed crimſon, each petal marked with deep purple at the baſe, and the ſtamina, antheræ and ſtyles being of the ſame dark colour, give a great brightneſs to the red part. Calyx pale green, ſomewhat membranous, ſoon falling off. Petals about 8, rarely more, often fewer, for Linnæus in a manuſcript note in his own *Species Plantarum* confeſſes he took the character there from a luxuriant flower. This ſpecies is however diſtinct enough from the pale-ſcarlet A. *æſtivalis* of the ſouth of Europe, with which Haller in his deſcription, No. 1158, ſeems to confound it, as Linnæus formerly did. In that the petals are obovate and narrow, the fruit long and cylindrical; in ours the petals are inverſely heart-ſhaped, concave, the fruit rather ovate, and not half ſo long. It is certainly an error in Linnæus to call the fruit of A. *æſtivalis* ovate, and this ſubcylindrical. The contrary is rather the caſe; at leaſt the former is truly cylindrical, and very long and ſlender compared with ours.



March 1st 1796 Published by Jas Sowerby London

DENTARIA bulbifera.

Bulbiferous Coral-wort.

TETRADYNAMIA Siliquoſa.

GEN. CHAR. *Pod* burſting elaſtically, the valves rolling back. *Stigma* notched. *Calyx-leaves* connected longitudinally.

SPEC. CHAR. Lower leaves pinnated; the uppermoſt ſimple.

SYN. Dentaria bulbifera. *Linn. Sp. Pl.* 912. *Hudſ. Fl. An.* 285. *With. Bot. Arr.* 683.

THIS rare plant grows wild in ſome few parts of England, in ſhady places, eſpecially at Harefield, in a grove now belonging to William Baynes Eſq. and in ſome parts of Buckinghamſhire not far from thence. Our ſpecimen was obligingly communicated by the Rev. Dr. Goodenough from his garden at Ealing, where the Dentaria is perfectly naturalized, and preſerves its original wild appearance.

The root is perennial, creeping horizontally, white, fleſhy, and ſet with alternate tooth-like protuberances, which gave occaſion to the generic name. Stem from the terminal bud of the laſt year, erect, round, ſimple, 18 to 24 inches high, leafy in the middle and upper part. Leaves alternate; the 2 or 3 lowermoſt pinnate, of 5 leaflets, ſome above them of 3, and the upper ones ſimple, gradually leſſening; leaflets all lanceolate, very irregularly and partially ſerrated, ſmooth, rather ſucculent. In the boſom of moſt of the leaves ſtands a ſolitary, oval, ſcaly, dark purple bud or bulb, which falling off vegetates in the ground, and thus the plant is copiouſly propagated, like the *Lilium bulbiferum*; conſequently its ſeeds are ſcarcely ever perfected, as happens to plants that increaſe much by root. The flowers are in a terminal corymbus, lilac-coloured, large and handſome, appearing early in May. The ſtigma is roundiſh, ſlightly notched.

Hooker del. et lith. Published 1st March 1820 by M. Harris, London.

CORNUS Suecica.

Dwarf Cornel.

TETRANDRIA Monogynia.

GEN. CHAR. *Cal.* of 4 teeth. *Petals* 4. *Drupa* inferior. *Nut* of 2 cells.

SPEC. CHAR. Herbaceous, Flower between two branches.

SYN. Cornus Suecica. *Linn. Sp. Pl.* 171. *With. Bot. Arr.* 161.

C. herbacea. *Hudſ. Fl. An.* 71.

Chamæpericlymenum. *Raii Syn.* 261.

MR. William Travis of Scarborough gathered the ſpecimen here figured on the ſide of a valley in that neighbourhood, called the *Hole of Horcum*, where this alpine plant grows abundantly, as well as about the Cheviot hills, Northumberland, and in the Highlands of Scotland, flowering in June and July. It is nearly allied to a favourite American plant, C. *canadenſis*, but does not thrive ſo well in a garden.

Root perennial, creeping, long and ſlender. Stems perfectly herbaceous, erect, riſing to the height of 3 or 4 inches, ſquare, leafy. Leaves oppoſite, ſeſſile, ovate, entire, ſtrongly ribbed, without ſtipulæ. Flowers in a little terminal pedunculated umbel, with a large involucrum of 4 ovate unequal white leaves, often bordered with red, and turning green as the fruit ripens. Each flower ſtands on a ſhort partial ſtalk, and is in every part, except the ſtamina, of an exceedingly deep purple, almoſt black. Stamina and antheræ whitiſh. The umbel might eaſily be taken, by a caſual obſerver, for one ſimple flower with 4 white petals, and we are afraid Ray underſtood it ſo, having perhaps not ſeen it alive. The fruit is round, red, ſweetiſh. On each ſide the ſtalk that ſupports the umbel ariſes the rudiment of a branch, which overtops the fruit before it arrives at maturity. The preſence of theſe branches diſtinguiſhes this ſpecies from *Cornus canadenſis*.

March 1st 1796 Published by Jas Sowerby London.

ERIOPHORUM alpinum.

Alpine Cotton-graſs.

TRIANDRIA Monogynia.

GEN. CHAR. *Glumes* chaffy, imbricated on all ſides. *Cor.* none. *Seed* 1, inveſted with very long hairs.

SPEC. CHAR. Stem naked, angular. Spike ſolitary, erect, ſhorter than the hair of the ſeeds.

SYN. Eriophorum alpinum. *Linn. Sp. Pl.* 77. *Flo. Lapp. Ed.* 2. 20. *Tranſ. of Linn. Soc. V.* 2. 290 & 356. *Fl. Dan. t.* 620. *Dickſ. Hort. Sicc. Faſc.* 8. 3.

Juncus alpinus bombycinus. *Scheuchz. Prod.* 27. *t.* 8. *f.* 1.

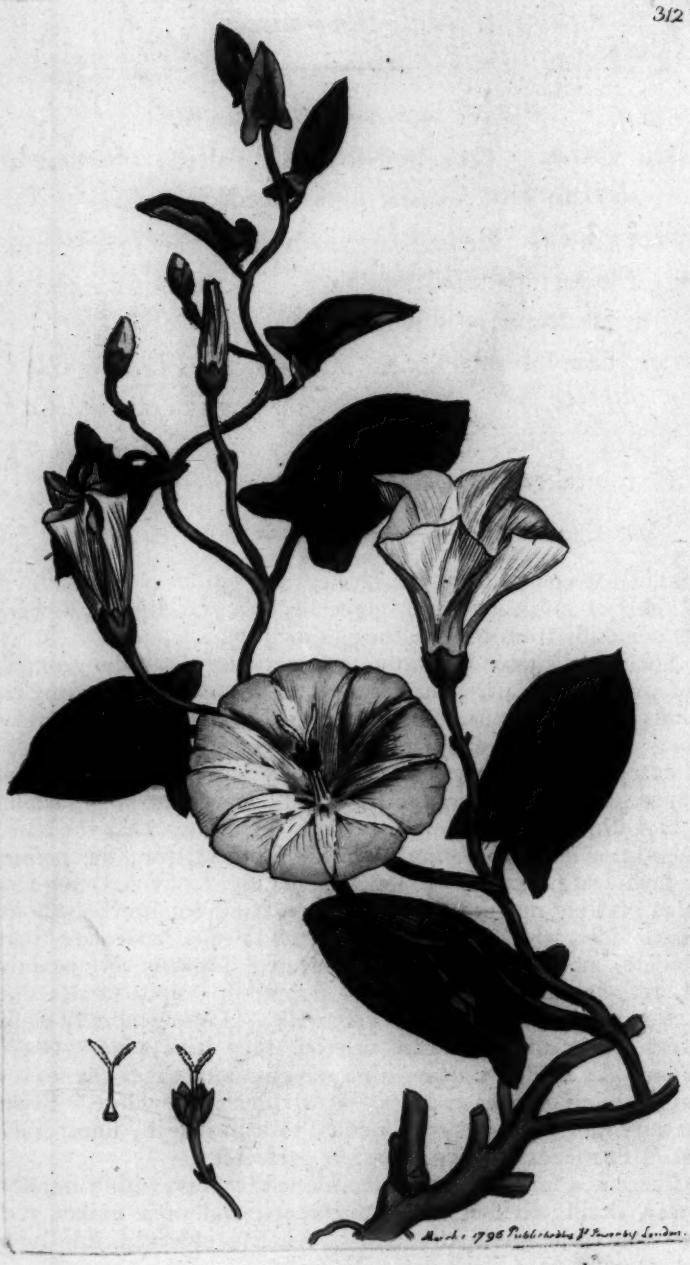
FIRST diſcovered in Britain by Mr. Brown and Mr. George Don, in a turfy bog 3 miles eaſt of Forfar, in the ſhire of Angus, Scotland.

We are obliged for wild ſpecimens to Mr. John Mackay of Edinburgh, a moſt diligent and ſkilful inveſtigator of the vegetable kingdom, by whoſe communications we have often been enriched. It grows in alpine ſituations, flowering about July, and has hitherto been announced as a native of our iſland, in the 2d volume of the Linn. Society's Tranſactions only.

Root perennial, creeping horizontally among bog-earth and ſand, with many fibrous radicles. Leaves few, linear, rough on the edges, obtuſe, ſheathing at their baſe, erect, ſometimes 3 or 4 together on a barren branch. Stems ſeveral, erect, much taller than the leaves, cloſe together, with 3 and ſometimes 4 rough angles, ſtriated, their baſe enveloped in one or more ſhort ſheathing leaves, and a few tubular, membranous, bluntly acuminated ſcales, ſeeming like the rudiments of leaves. Spike ſolitary, terminal, erect, oval, ſmall, of ſeveral ovate, yellowiſh brown, ſharply keeled ſcales, the lowermoſt tipped with a leafy point. Seed ſharply triangular, clothed with long, not very numerous, hairs, which originate from its baſe, and riſe much above the top of the ſtyle. Their extreme whiteneſs and their delicate texture give an elegant appearance to the plant, though it boaſts none of thoſe gaudy colours requiſite to excite the attention of many, who really fancy themſelves perſons of taſte and admirers of Nature, but who are as inadequate judges of their own talents, as of the univerſal elegance and wiſdom of the creation around them.

RHODORA alpinum.

Alpine Cotton-grass.



March 1796 Published by J. Sowerby London.

CONVOLVULUS arvenſis.

Small Bind-weed.

PENTANDRIA Monogynia.

GEN. CHAR. *Cor.* bell-ſhaped, plaited. *Stigmas* 2. *Capſule* with 2 cells, and 2 ſeeds in each.

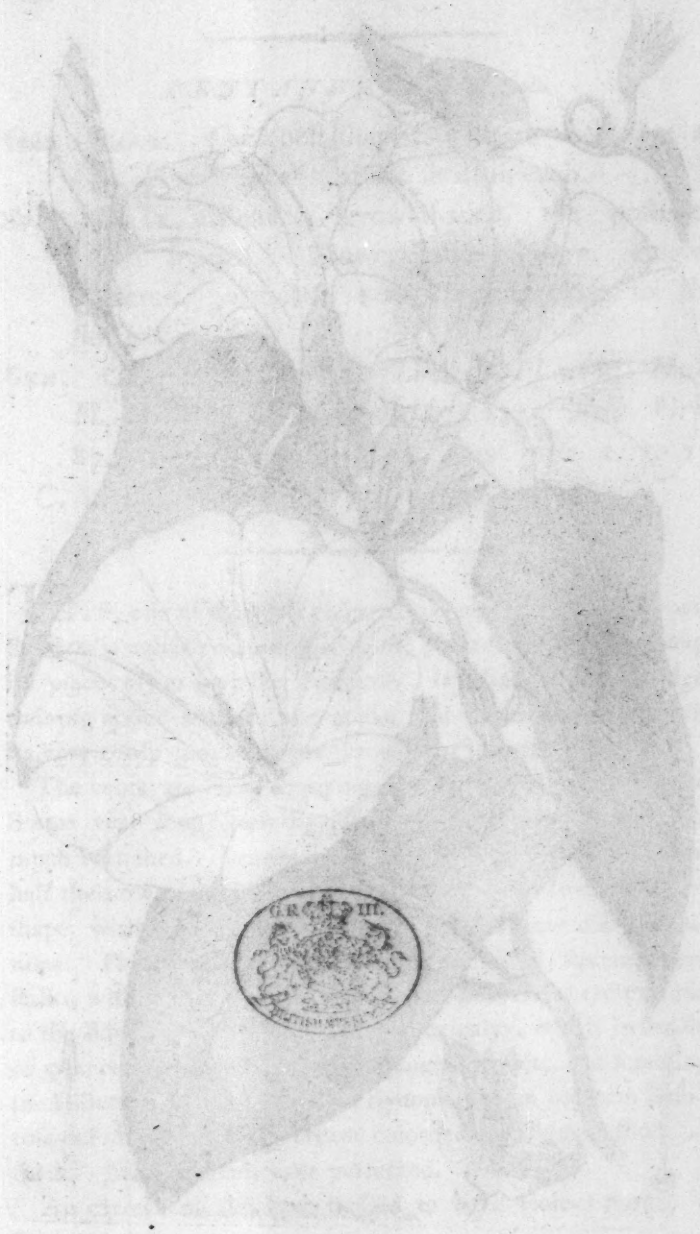
SPEC. CHAR. Leaves arrow-ſhaped, the lobes acute. Flowers generally ſolitary. Bracteæ minute, remote from the flower.

SYN. Convolvulus arvenſis. *Linn. Sp. Pl.* 218. *Hudſ. Fl. An.* 88. *With. Bot. Arr.* 212. *Relh. Cant.* 86. *Sibth. Ox.* 76. *Curt. Lond. Faſc.* 2. *t.* 13. C. minor vulgaris. *Raii Syn.* 275.

BUT too common for the farmer and gardener in fields and all kinds of cultivated land, eſpecially in a gravelly ſoil, flowering copiouſly from May to the end of July.

The root is perennial, running ſo very deep into the ground, and growing ſo faſt, that it is next to impoſſible to deſtroy it. Stems very numerous, long, climbing and twining round every thing in their way, angular, ſlightly downy, not much branched except at the very bottom, clothed with alternate arrow-ſhaped leaves on downy footſtalks; the leaves are very various in breadth, entire, except one tooth ſometimes near the baſe, and a little downy. Stipulæ none. Flowers from the boſom of each leaf, ſolitary, on long (generally undivided) angular ſtalks ſwelling upwards, with a pair of minute bracteæ about their middle, which are downy, narrow, rather lanceolate than ſubulate, and ſometimes even obovate. Flowers very beautiful, roſe-coloured, varying with lighter or deeper ſhades and lines of crimſon, the plaits yellowiſh. They generally cloſe before rain; in dry warm weather they have a very ſweet almond-like ſmell. Calyx with a membranous edge, the leaves obtuſe, lying over each other. Antheræ red or white. Style not very long; ſtigmas nearly equal to it in length, linear, diſtant. The ſeeds happily are rarely perfected.

There is a ſingular variety mentioned by Ray, with a ſmaller flower, deeply divided into 5 ſegments, and of a darker red than the common kind. Dr. Smith has obſerved this in a hedge out of St. Giles's gates, Norwich.


GEORGIUS III.

April 1st 1796 Published by J.t Poverby London

CONVOLVULUS ſepium.

Great Bind-weed.

PENTANDRIA Monogynia.

GEN. CHAR. *Cor.* bell-ſhaped, plaited. *Stigmas* 2. *Capſule* with 2 cells, and 2 ſeeds in each.

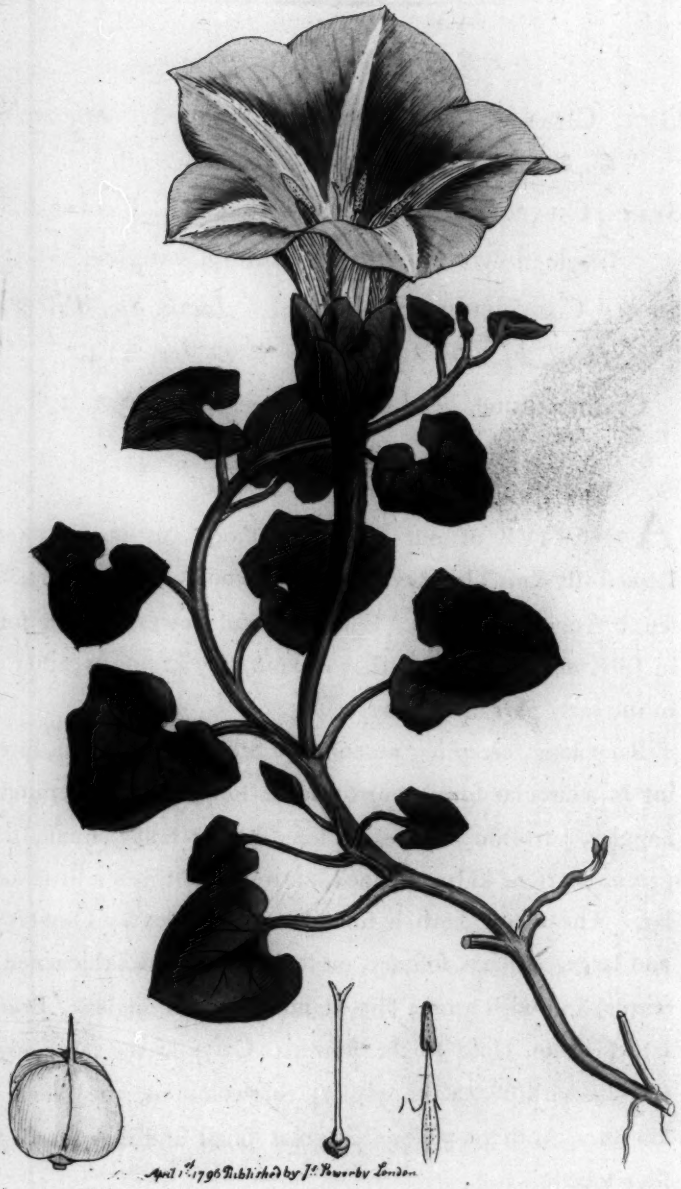
SPEC. CHAR. Leaves arrow-ſhaped, the poſterior lobes lopped. Flower-ſtalks ſquare, ſingle-flowered. Bracteæ heart-ſhaped, cloſe to the flower.

SYN. Convolvulus ſepium. *Linn. Sp. Pl.* 218. *Hudſ. Fl. An.* 88. *With. Bot. Arr.* 213. *Relh. Cant.* 87. *Sibth. Ox.* 76. *Curt. Lond. faſc.* 1. *t.* 13. C. major. *Raii Syn.* 275.

THIS, one of the moſt elegant and graceful of all our wild flowers, is equally common with the preceding ſpecies, though its place of growth be different. It inhabits moiſt hedges, twining about willows and reeds, and decorating them with its very conſpicuous flowers throughout July and Auguſt.

The roots are long, creeping, and perennial, a little fleſhy. Stems very long, twining, ſomewhat angular, ſmooth, not much branched. Leaves alternate, on ſmooth footſtalks about half their own length, dependent, ſmooth, of a ſwelling arrow-ſhape, with the angles at the baſe abruptly cut off. Stipulæ none. Flowers ſolitary, on axillary, undivided, ſquare, curved ſtalks, with a pair of heartſhaped, red-bordered bracteæ, cloſe to the flower and enfolding the proper calyx, which is ſmaller, of 5 lanceolate leaves. Corolla generally white, but ſometimes (as Dillenius obſerves in Ray's Synopſis) of an uniform fleſh or roſe-colour. Antheræ cream-coloured. Stigmas ſhort and thick. Seeds ſcarcely ever perfected.

An extract of the herb is ſaid to be a violent purge, like Scammony.



April 1st 1796 Published by Jas Sowerby London

CONVOLVULUS Soldanella.

Sea Bind-weed.

PENTANDRIA Monogynia.

GEN. CHAR. *Cor.* bell-ſhaped, plaited. *Stigmas* 2. *Capſule* with 2 cells, and 2 ſeeds in each.

SPEC. CHAR. Leaves kidney-ſhaped. Flower-ſtalks ſingle-flowered, with membranous angles.

SYN. Convolvulus Soldanella. *Linn. Sp. Pl.* 226. *Hudſ. Fl. An.* 89. *With. Bot. Arr.* 214.

C. maritimus, Soldanella dictus. *Raii Syn.* 276.

A NATIVE of our ſandy ſea ſhores, as at Yarmouth, Loweſtoft, &c. The Rev. Mr. Baker and A. B. Lambert, Eſq. ſent it from Weymouth. The beautiful flowers may be found in July, not much later; they expand only in fine weather and in the early part of the day.

Root long, creeping, perennial. Stems procumbent, ſpreading in a circular form, 5 or 6 inches long, but little branched, angular, purpliſh. Leaves on longiſh foot-ſtalks, ſmall, dark-green, heart or kidney-ſhaped, entire, ſometimes a little angular. The whole herb is ſmooth and ſucculent. Flowers few and large, axillary, ſolitary, on long flower-ſtalks thickened upwards, and with 3 or 4 dilated membranous angles. Bracteæ large, ovate, cloſe to the flower. Calyx-leaves large, ovate. Corolla with five acute angles, roſe-coloured, the plaits yelloviſh. Antheræ yellow. Stigmas ſmall and ſharp. Capſule four-lobed.

CONVOLVULUS Soldanella.

Sea Bind-weed.

PENTANDRIA Monogynia.

Gen. Char. Cor. bell-shaped, plaited. Stigmas 2.
Caps. with 2 cells and 2 seeds in each.

Spec. Char. Leaves kidney-shaped. Flower-stalks
single-flowered, with membranous angles.

Syn. Convolvulus Soldanella. Linn. Sp. Pl. 224.
Hall. Pl. Alp. 80. With. Bot. Arr. 214.
C. maritimus, Soldanella dictus. Ray Syn. 276.

A NATIVE of our sandy sea shores, as at Yarmouth, Lowestoft, &c. The Rev. Mr. Baker and A. D. Lambert, Esq. sent it from Weymouth. The beautiful flower may be found in July, not much later; they expand only in fine weather and in the early part of the day.

Root long, creeping, perennial. Stems procumbent, spreading in a circular form, 5 or 6 inches long, but little branched, angular, purplish. Leaves on long flower-stalks, small, dark-green, heart or kidney-shaped, entire, sometimes a little angular. The whole herb is smooth and succulent. Flowers few and large, axillary, solitary, on long flower-stalks thickened upwards, and with 3 erect distant membranous angles. Bractes large, ovate, close to the flower. Calyx-leaves large, ovate. Corolla with five acute angles, rose-coloured, the plaits yellowish. Anthers yellow. Stigmas small and sharp. Capsule four-lobed.

GR III
MONTIS MISERICORDIA

April 1. 1796 Published by J.t Power by Lambs.

LOLIUM perenne.

Perennial Darnel, or Rye-graſs.

TRIANDRIA Digynia.

GEN. CHAR. *Cal.* of one huſk, fixed, many-flowered.

SPEC. CHAR. Flowers beardleſs. The little ſpikes compreſſed, longer than the calyx.

SYN. Lolium perenne. *Linn. Sp. Pl.* 122. *Hudſ. Fl. An.* 55. *With. Bot. Arr.* 120. *Relh. Cant.* 52. *Sibth. Ox.* 50. *Leers Herb.* 47. *t.* 12. *f.* 1.

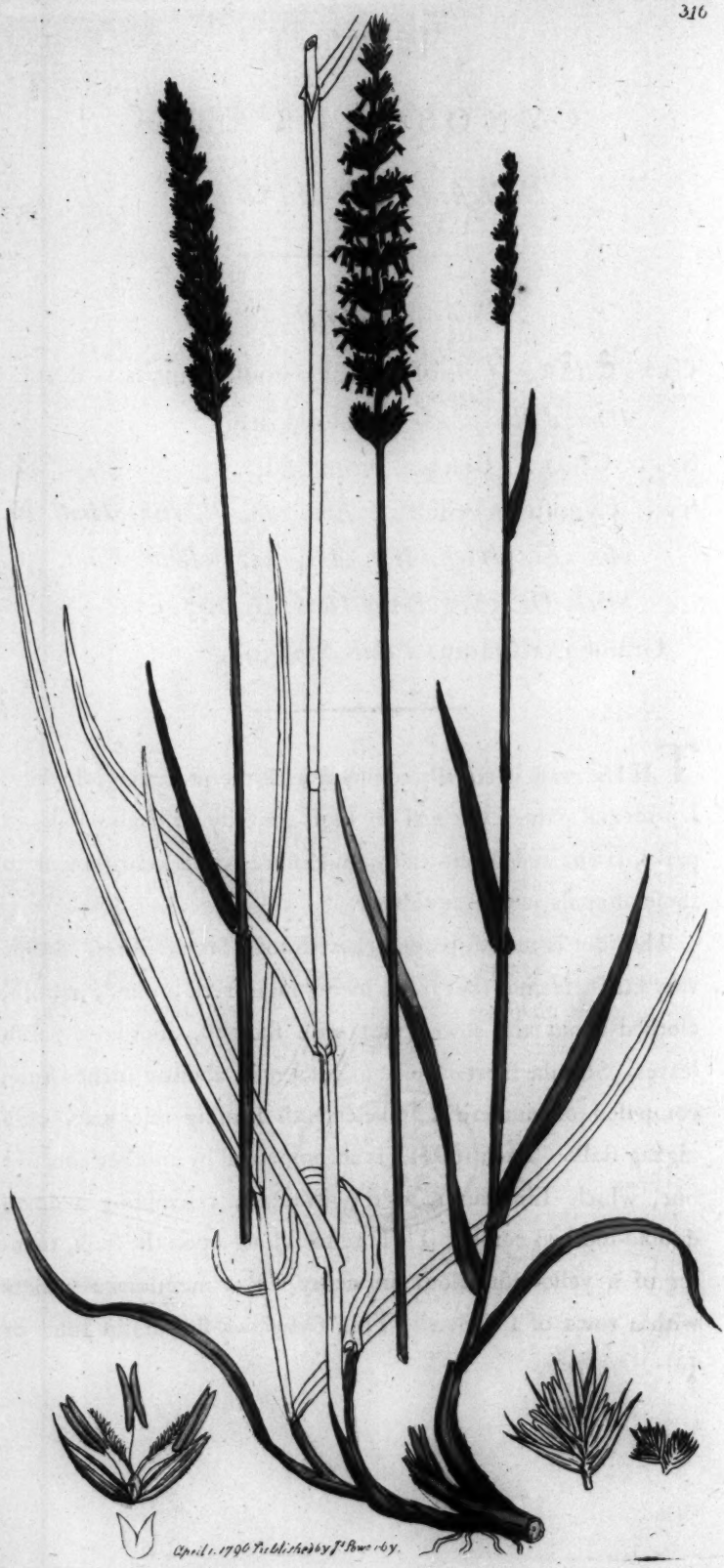
Gramen loliaceum anguſtiore folio et ſpica. *Raii Syn.* 395.

THIS very common ſpecies of graſs is well known to the farmer by the name of Rye-graſs, Ray-graſs, or Crap. Its agricultural merits were firſt diſcovered in Norfolk, and from thence the ſeeds have been diſtributed throughout the kingdom, thoſe who bought them little ſuſpecting the plant was already a weed in their own fields. Its chief uſe is for an early crop of hay upon high or ſandy lands. It makes a fine turf; but though the roots are perennial, it does not laſt many years, except (according to Stillingfleet) the ſoil be very rich.

Root of a few ſimple fibres. Stems a foot high, round, ſmooth, rigid, with ſwelling purpliſh joints. Leaves dark green; ſtipulæ ſhort and entire. Spike two-ranked and compreſſed, the common ſtalk zigzag. Huſks lanceolate and acute. Antheræ cloven at each end, purple. Stigmas ſeſſile, downy above. Germen roundiſh. Seed linear.

The ſpike is ſometimes branched in an alternate manner, and more frequently very much condenſed into a flat oval form. It flowers in June.

G.R.
III.
BRITISH MUSEUM



April 1. 1796 Published by J.t Sowerby.

CYNOSURUS criſtatus.

Creſted Dog's-tail Graſs.

TRIANDRIA Digynia.

GEN. CHAR. *Cal.* of 2 huſks, containing few florets. *Partial Receptacle* unilateral, leafy.

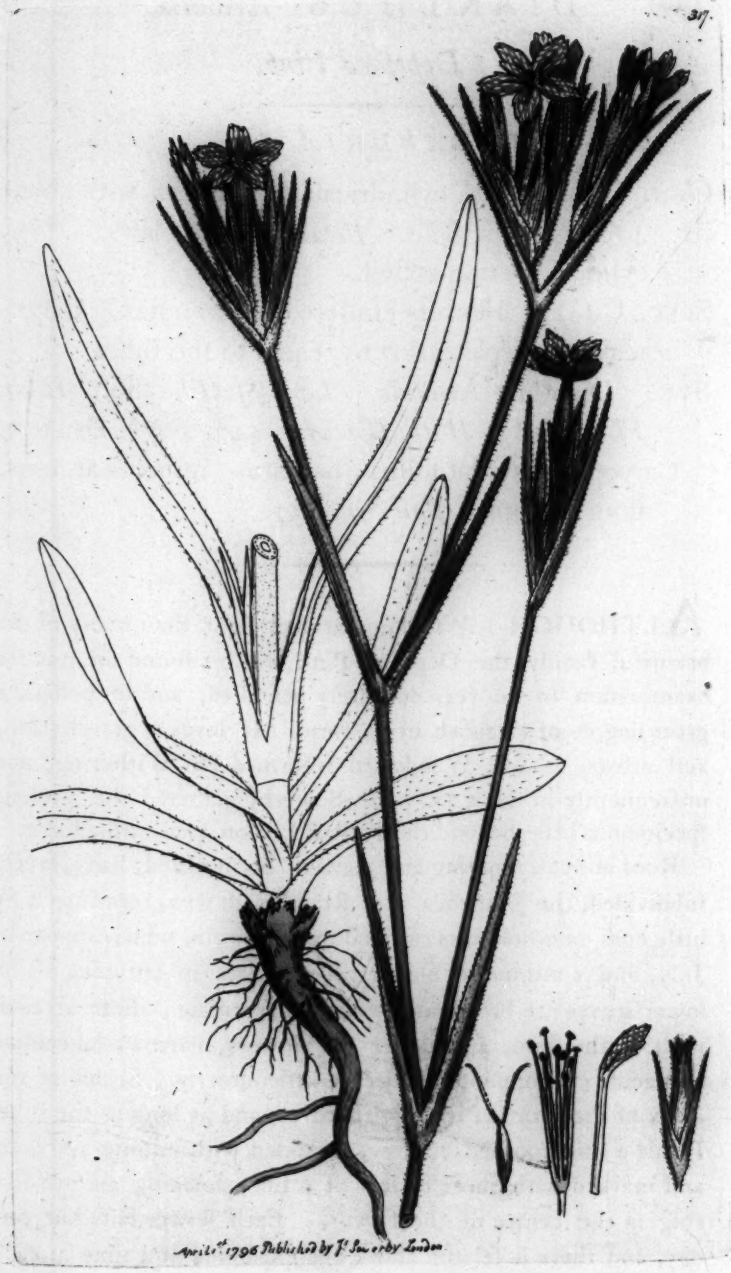
SPEC. CHAR. Bracteæ pinnatifid.

SYN. Cynoſurus criſtatus. *Linn. Sp. Pl.* 105. *Hudſ. Fl. An.* 59. *With. Bot. Arr.* 95. *Relh. Cant.* 39. *Sibth. Ox.* 52. *Leers Herb.* 49. *t.* 7. *f.* 4.

Gramen criſtatum. *Raii Syn.* 398.

THIS graſs is equally common with the preceding, making a principal part of the turf on high gravelly or chalky ſoils, in parks, lawns and ſheep-walks, and affords good nouriſhment to thoſe animals as well as to deer.

The root is tufted, perennial, with long ſimple fibres. Stems very erect, from a foot to 18 inches high, rigid, round, ſmooth, clothed about the lower part with ſhortiſh, alternate, paliſh leaves. Stipulæ ſhort. Spike green, erect, about 2 inches long, compoſed of numerous ſpikelets, all leaning one way, on a zigzag ſtalk. Each ſpikelet is accompanied by another abortive one, which Linnæus calls the bracteæ, reſembling a ſmall double-toothed comb. Theſe remain long upon the ſtalk, turning of a yellowiſh colour in decay. Ray mentions a variety with 4 rows of ſpikelets. This *Cynoſurus* flowers in June or July.



April 1st 1796 Published by J.t Sowerby London

DIANTHUS Armeria.

Deptford Pink.

DECANDRIA Digynia.

GEN. CHAR. *Cal.* cylindrical, of one leaf, with about 4 ſcales at the baſe. *Petals* 5, with claws. *Capſ.* cylindrical, one-celled.

SPEC. CHAR. Flowers cluſtered, in bundles. Calyx-ſcales lanceolate, downy, equal to the tube.

SYN. Dianthus Armeria. *Linn. Sp. Pl.* 586. *Hudſ. Fl. An.* 183. *With. Bot. Arr.* 440. *Sibth. Ox.* 139. Caryophyllus latifolius barbatus minor annuus, flore minore. *Raii Syn.* 337.

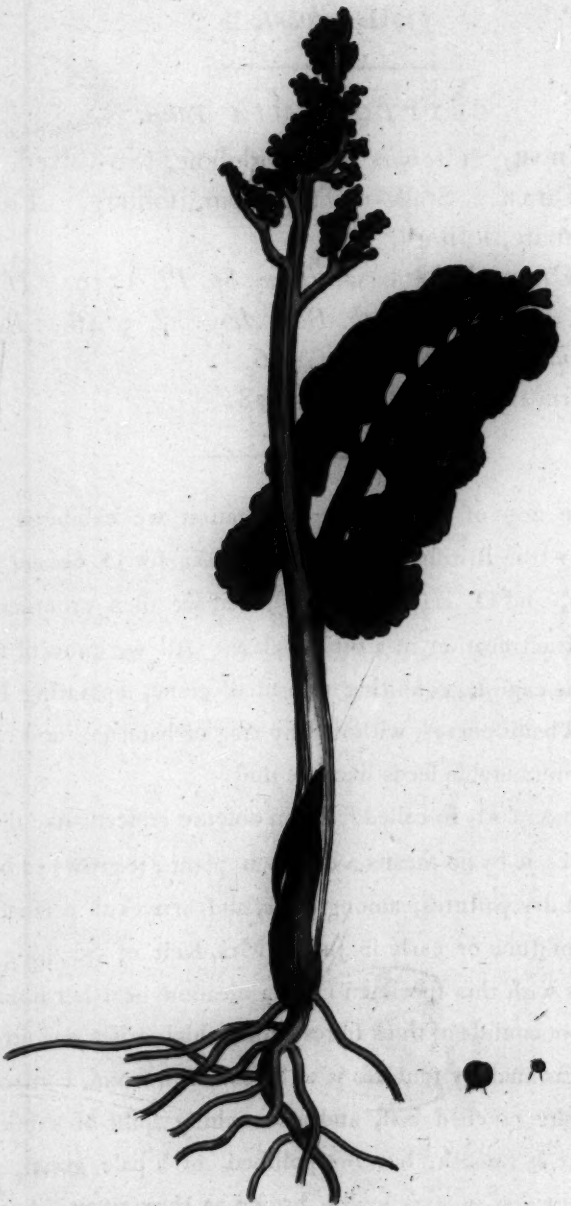
ALTHOUGH leſs ſtriking at firſt ſight than many of its beautiful family, the Deptford Pink will be found on minute examination to be very delicately pencilled, and to poſſeſs a great degree of elegance in its form. It loves a gravelly ſoil, and grows, as Mr. Woodward informed Dr. Withering, not unfrequently in Norfolk. Mr. Sowerby gathered the preſent ſpecimen a little beyond the Falſtaff Inn on Gad's hill, Kent.

Root annual, tapering and zigzag. Stem round, leafy, erect, ſubdivided, the branches very ſtraight, downy, terminated by little compound cluſters of inodorous flowers, which appear in July, and continue to bloom till very late in autumn. The lower leaves are broad and ſomewhat ſpatulate; thoſe at each joint of the ſtem, and under the flowers, narrow, lanceolate and acute; all oppoſite, entire, a little downy. Scales of the calyx of the form of the upper leaves, and as long as the tube. Petals a little toothed, narrow, ſprinkled with minute red dots, and marked with more or leſs of a line, forming an eye-like ring in the centre of the flower. Each flower laſts but one day, and there is ſeldom above one expanded at a time in each cluſter. The ſeeds are black, flat and minute.

DIANTHUS Armeria.

Deptford Pink.

GR III
BRITISH MUSEUM



April 1st 1796 Published by J. Sowerby London.

OSMUNDA Lunaria.

Moonwort.

CRYPTOGAMIA Filices.

GEN. CHAR. *Capſules* naked, globoſe, two-valved.

SPEC. CHAR. Stalk on the ſtem, ſolitary. Frond pinnate, ſolitary.

SYN. Oſmunda Lunaria. *Linn. Sp. Pl.* 1519. *Hudſ. Fl. An.* 449. *With. Bot. Arr. vol.* 3. 46. *Relh. Cant.* 386. *Sibth. Ox.* 266.

Lunaria minor. *Raii Syn.* 128.

IN plate 209 of the preſent publication we exhibited the other only true Britiſh ſpecies of *Oſmunda* (for O. *Spicant* is a *Blechnum*, and O. *criſpa* a *Pteris*), and we then promiſed to give the fructification in a future plate. All we know of that part is the capſule, conſiſting of a ſmall globe, ſeparating into two equal hemiſpheres, without any ring or bandage, and containing innumerable ſeeds like fine duſt.

The Moonwort, ſo called from an obſcure creſcent-like ſhape in its leaves, is by no means a common plant; it grows in both moiſt and dry paſtures, among graſs, and arrives at perfection the end of June or early in July. Mrs. Kett of Seething favoured us with this ſpecimen from a meadow near her houſe.

The root conſiſts of thick fibres, from which ariſes one ſimple ſtem, or (as analogy requires it to be called) a frond, compoſed of a pinnate notched leaf, and a branching ſpike of capſules. Every part is ſmooth, but not poliſhed, of a pale green, the capſules turning to a yellowiſh brown as they ripen. Sometimes the leaf is bipinnate, but that variety is rare.

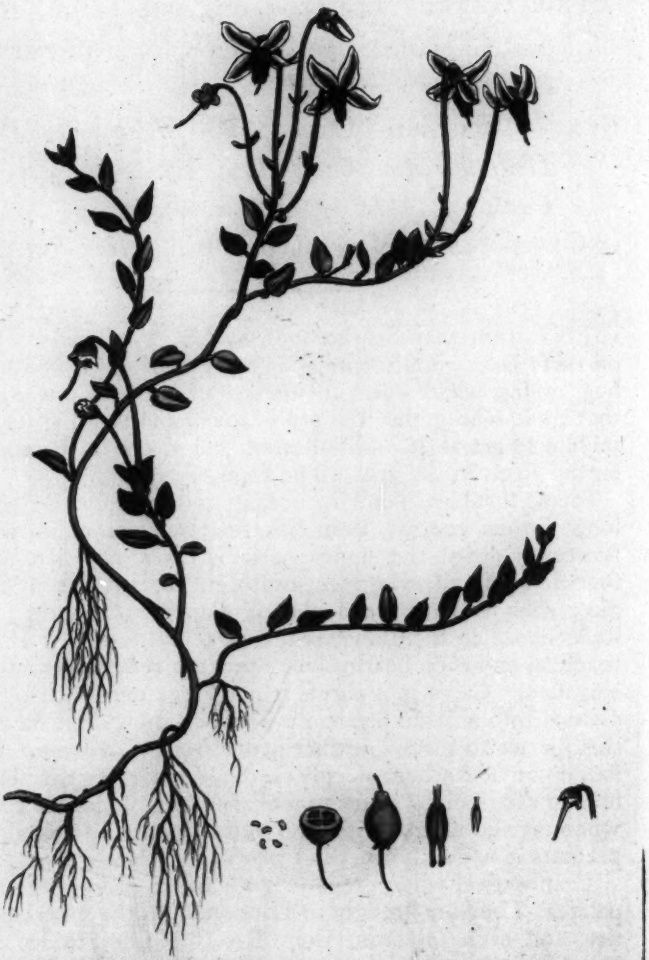
OSMUNDA Lunaria.

Moonwort.

Gen. Char. Capsules ribbed, globofe, two-valved.
Spec. Char. Stalk of the frem, foliary. Frond pinnate, foliary.

Syn. Osmunda Lunaria. Linn. Sp. Pl. 1519. Hall. Fl. Helv. Cam. Epit. Bot. Adv. vol. 3. 46. Reib. Lunaria minor. Ray Syn. 124.

G.R.
BRITISH MUSEUM



May 1st 1798 Published by James Sowerby, London.

VACCINIUM Oxycoccos.

Cranberry.

OCTANDRIA Monogynia.

GEN. CHAR. *Cor.* of 1 petal. *Filaments* ariſing from the receptacle. *Berry* inferior, with 4 cells and many ſeeds.

SPEC. CHAR. Leaves evergreen, entire, revolute, ovate, acute. Stems creeping, thread-ſhaped, ſmooth.

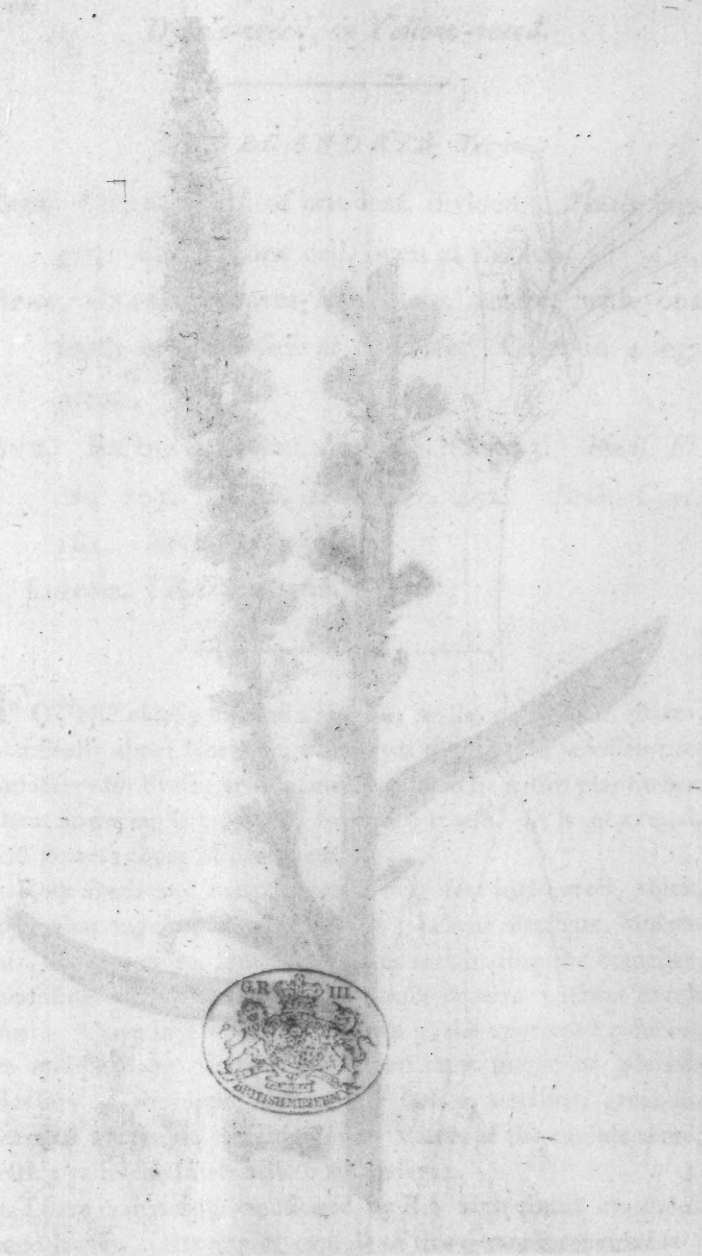
SYN. Vaccinium Oxycoccos. *Linn. Sp. Pl.* 500. *Hudſ. Fl. An.* 164. *With. Bot. Arr.* 395. *Relh. Cant.* 154. *Dickſ. H. Sicc. faſc.* 5. 11.

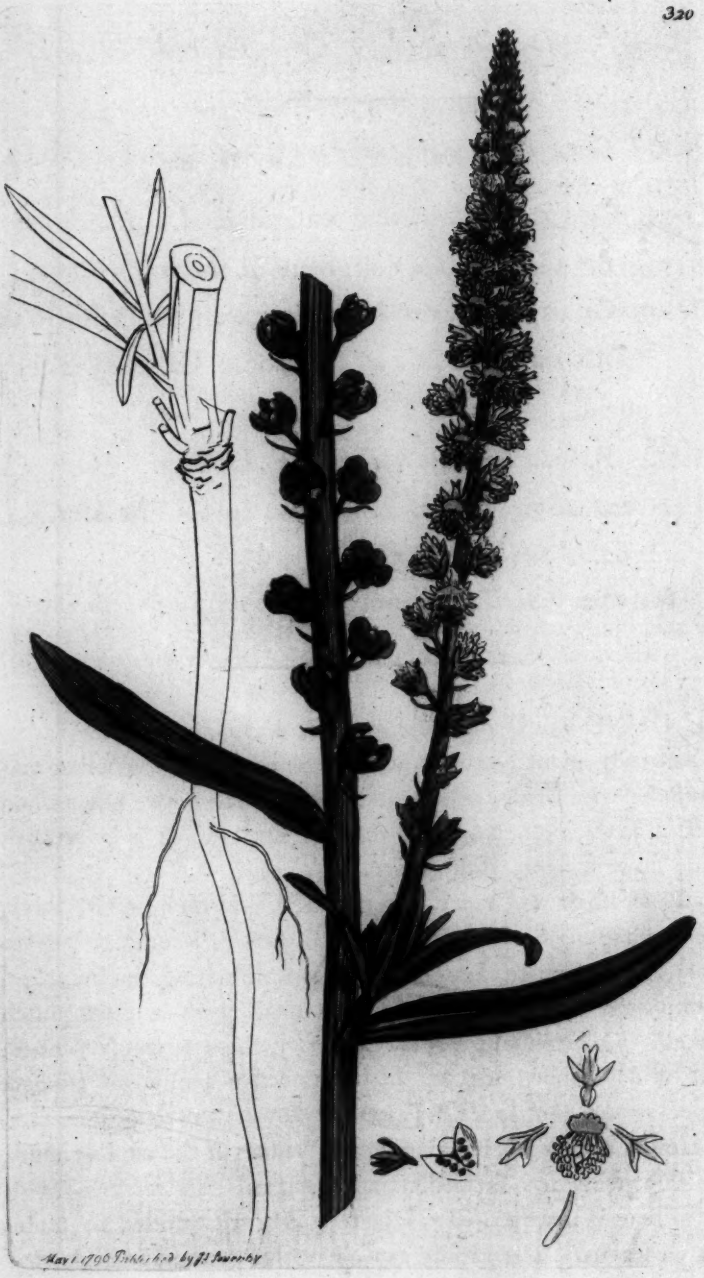
Oxycoccus ſeu Vaccinia paluſtria. *Raii Syn.* 267.

SENT from near Scarborough by Mr. W. Travis. It grows on turfy bogs, moſtly entangled in tufts of *Sphagnum* and other bog moſſes, which cover the ſurface of clear ſhallow waters, ſo that thoſe who gather the fruit are obliged to wade up to their middle to get at it. The flowers come out in June, and the berries ripen in Auguſt. The roots are perennial.

Stems ſhrubby, ſlender, trailing and creeping by means of long fibrous roots. Branches ſcattered, procumbent, leafy, flowering about the upper part. Leaves alternate, on ſhort foot-ſtalks, ſmall, evergreen, ovate, entire, revolute in the margin; dark ſhining green above; glaucous beneath. Flower-ſtalks about an inch long, red, with a few ſcattered or oppoſite bracteæ, and each bearing one drooping red flower of ſingular elegance. Calyx in 4 obtuſe fringed ſegments. Corolla deeply divided into 4 ovate petals, on which account ſome have judged this ſpecies to form a diſtinct genus from *Vaccinium*. Stamina flat, downy. Antheræ deeply cloven, diſcharging the pollen by a hole in each point. Berry pear-ſhaped or globular, of 4 cells, red when arrived at maturity, and often ſpotted. Our figure repreſents it not fully ripe, in order to ſhew the cells.

Cranberries, when prepared with ſugar, are grateful to moſt palates. They are brought to London from the moorland counties, and even imported from Ruſſia. The Swedes have no idea of putting them to any other uſe than to boil ſilver plate to its proper whiteneſs, the ſharp acid of the cranberry corroding the external particles of the copper alloy.


G.R. III.



May 1 1796 Published by J.J. Sowerby

RESEDA Luteola.

Dyer's-weed, or Yellow-weed.

DODECANDRIA Trigynia.

GEN. CHAR. *Cal.* of one leaf, divided. *Petals* jagged. *Capſ.* of one cell, open at the top.

SPEC. CHAR. Leaves lanceolate, entire, with one tooth on each ſide at the baſe. Calyx in 4 ſegments.

SYN. Reſeda Luteola. *Linn. Sp. Pl.* 643. *Hudſ. Fl. An.* 207. *With. Bot. Arr.* 492. *Relh. Cant.* 184. *Sibth. Ox.* 150.

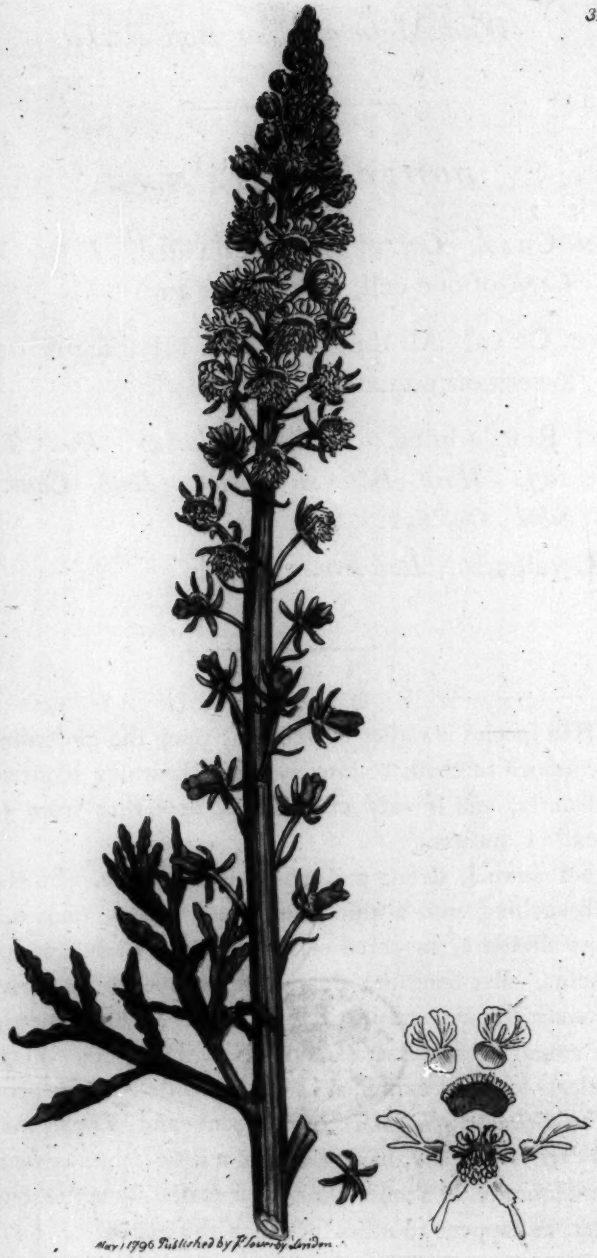
Luteola. *Raii Syn.* 366.

FOUND chiefly on waſte ground, walls and ſimilar places, plentifully about Norwich, where it is uſed in the woollen manufactory for dyeing yellow and green. The entire plant when about flowering is employed for that purpoſe. It is an annual, and flowers about Midſummer.

Root ſmall and taper. Stem 2 or 3 feet high, erect, thick, ſomewhat angular, branched, leafy. Leaves alternate, lanceolate, obtuſe, entire, ſmooth. Spikes terminating the branches, conſiſting of numerous pale greeniſh flowers without much ſmell. Calyx in 4 ſegments. Petals 3, the uppermoſt 3-lobed, its middle lobe cloven; the lateral ones ſimple or 3-lobed. Nectary on the upper ſide of the flower, notched, greeniſh. Stamina numerous, hanging down. Valves of the capſule acute, with 3 yellowiſh intermediate appendages.

There is a variety mentioned by Ray with curled or undulated leaves. The gaping capſule of this genus is remarkable.

G.R. III.
BRITISH MUSEUM



May 1 1796 Published by F. Sowerby London.

RESEDA lutea.

Wild Mignonette, or Baſe Rocket.

DODECANDRIA Trigynia.

GEN. CHAR. *Cal.* of one leaf, divided. *Petals* jagged. *Capſ.* of one cell, open at the top.

SPEC. CHAR. All the leaves with three ſegments; the lowermoſt pinnate.

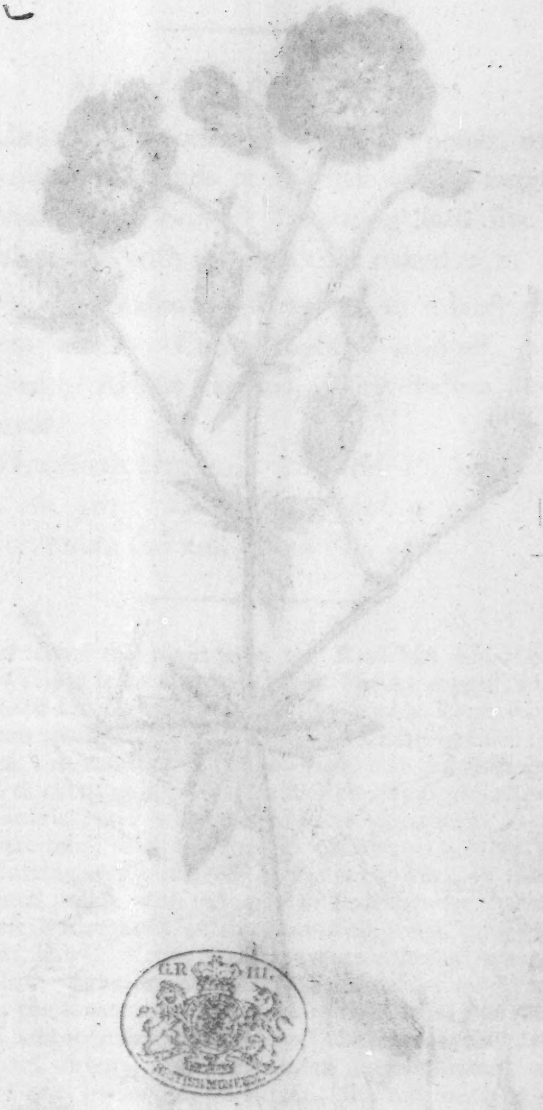
SYN. Reſeda lutea. *Linn. Sp. Pl.* 645. *Hudſ. Fl. An.* 207. *With. Bot. Arr.* 493. *Relh. Cant.* 184. *Sibth. Ox.* 151.

R. vulgaris. *Raii Syn.* 366.

THIS ſpecies is rather leſs general than the preceding, being confined to chalk countries, where however it grows very abundantly, and is very ornamental, flowering from June to the end of autumn.

Root annual, ſtrong and woody in ſubſtance. Stems ſeveral, branching into a thick buſhy tuft, round, ſmooth, leafy. Leaves alternate, in three or more linear undulated pointed ſegments, paler beneath; the lower ones once or even twice pinnated. Spikes terminating the branches, of numerous ſulphur-coloured flowers. Calyx in ſix ſegments. Petals ſix, ſingularly lobed as expreſſed in our figure. Nectary green.

The *Reſeda criſpa gallica* of Boccone and Ray ſeems to be a very trivial variety, having leaves a little more curled, and, in conſequence of a mild climate or ſeaſon, living through the winter, as happens to other ſpecies of this genus.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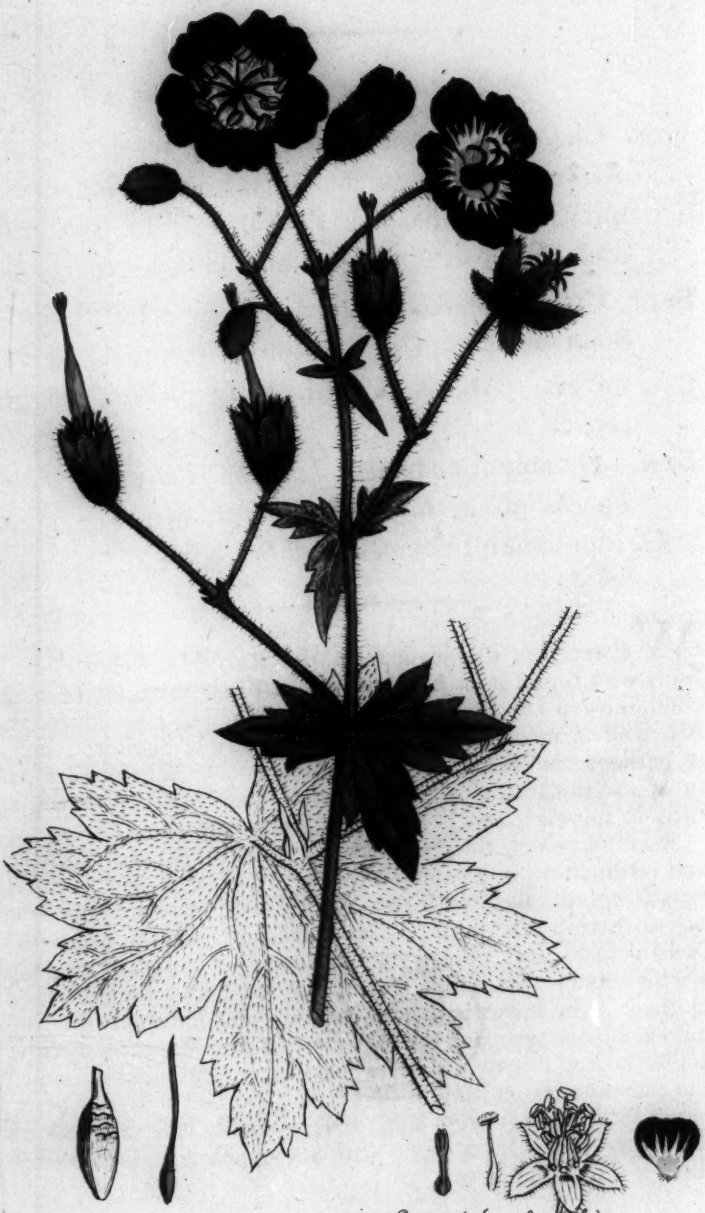


1795. Published by James Sowerby, London.

GERANIUM phæum.

Duſky Craneſbill.

MONADELPHIA Decandria.

GEN. CHAR. *Style* one. *Cor.* of five petals, regular. *Nectary* five glands at the baſe of the longer ſtamina. *Fruit* beaked, ſeparating into five arilli, each tipped with a long ſimple naked awn.

SPEC. CHAR. Stalks two-flowered, in a leafy panicle. Stem erect. Calyx ſlightly pointed. Petals waved. Arillus keeled, hairy below, rugged above.

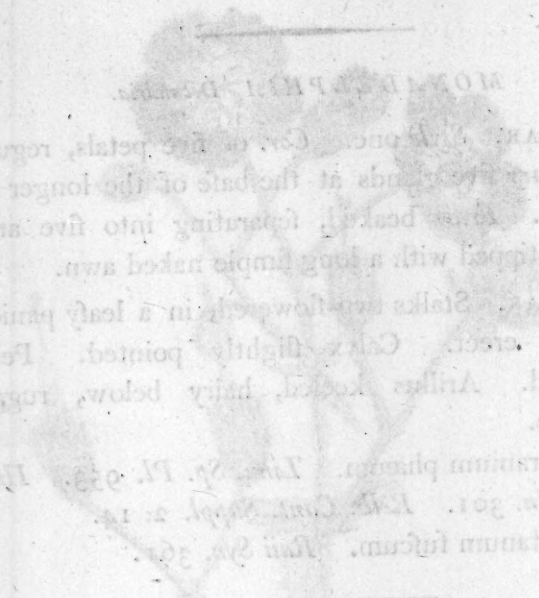
SYN. Geranium phæum. *Linn. Sp. Pl.* 953. *Hudſ. Fl. An.* 301. *Relh. Cant. Suppl.* 2. 14.
G. montanum fuſcum. *Raii Syn.* 361.

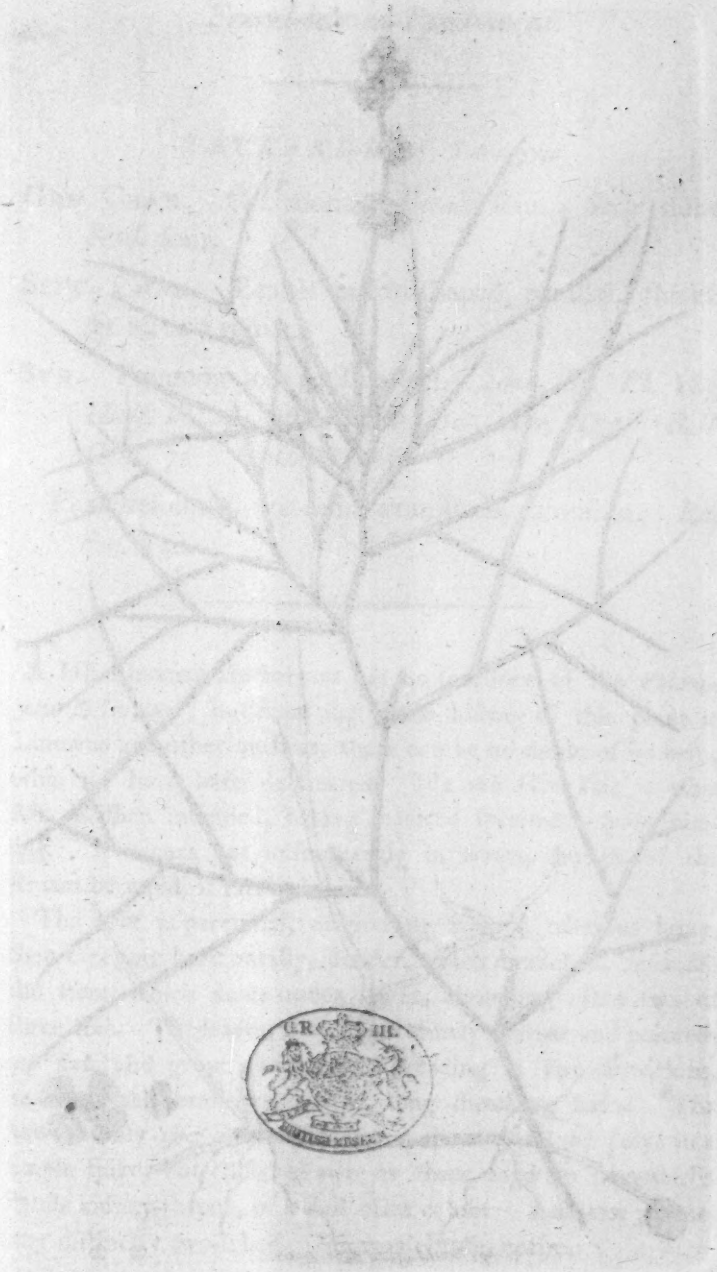
WE received this plant from the Rev. Mr. Abbot of Bedford, who found it at Everholt. Mr. Sims, druggiſt, of Norwich, ſhewed Dr. Smith ſpecimens gathered in Lancaſhire, and Mr. Relhan mentions it as a native of Cambridgeſhire; but it is perhaps the rareſt Britiſh *Geranium*. It inhabits dry paſtures and thickets, chiefly in mountainous countries, flowering early in ſummer, and is often cultivated in gardens.

Root perennial, thick and ſtrong. Stem erect, hairy, forked and terminating in a panicle of numerous flowers, on ſpreading two-flowered ſtalks, with two pair of ſmall brown chaffy bracteæ at their bifurcation. Calyx-leaves elliptical, tipped with a ſmall point, hairy. Petals dark chocolate-coloured, wavy, with a white claw. Stamina all fertile. Seed-caſes ſtrongly keeled, clothed in the lower part with thick upright hairs; at the ſummit naked, and wrinkled tranſverſely. The leaves are many-lobed and crenate, downy, with prominent interbranching veins; the radical ones on longiſh foot-ſtalks, the reſt ſolitarily placed oppoſite to each flower-ſtalk, and gradually leſſening towards the upper part of the ſtem. Stipulæ much like the bracteæ, though ſomewhat larger.

GERANIUM - phæum.

Dusky Cranesbill.

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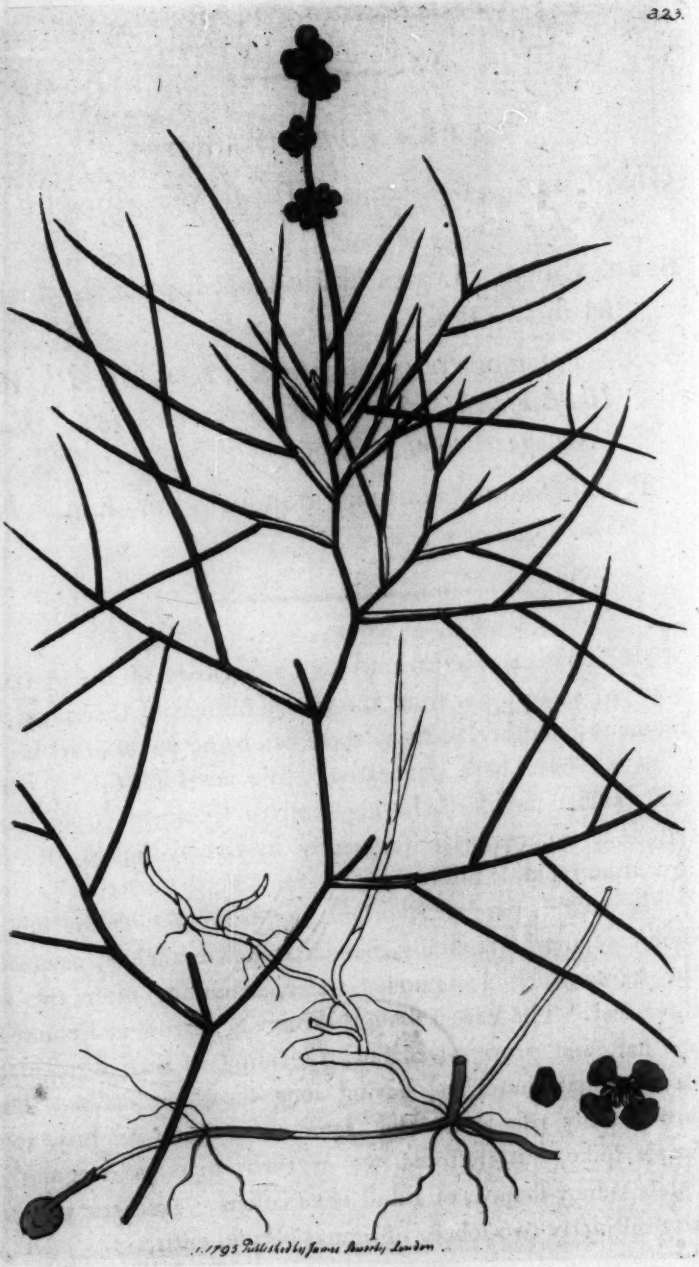


1793 Published by James Sowerby London.

POTAMOGETON pectinatum.

Fennel-leaved Pond-weed.

TETRANDRIA Tetragynia.

GEN. CHAR. *Cal.* none. *Petals* four. *Style* none. *Seeds* four.

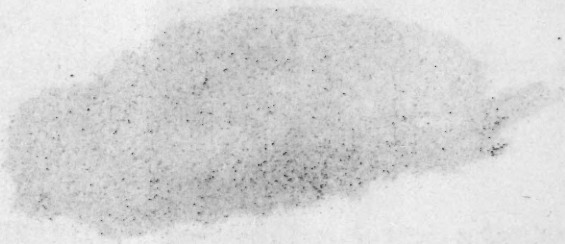
SPEC. CHAR. Leaves briſtle-ſhaped, parallel, thickly ſet in two ranks.

SYN. Potamogeton pectinatum. *Linn. Sp. Pl.* 183. *Hudſ. Fl. An.* 76. *With. Bot. Arr.* 175. *Relh. Cant.* 72. *Sibth. Ox.* 66.

P. millefolium, ſeu foliis gramineis, ramoſum. *Raii Syn.* 150.

THE Linnæan Herbarium has no ſpecimen of the *Potamogeton pectinatum*; but from the whole hiſtory of this plant in Linnæus and other authors, there can be no doubt of its being what we have here delineated. We are ſure this is what Mr. Relhan intended, having received ſpecimens from himſelf. It occurs not unfrequently in rivers, though, if the ſtream be rapid, it rarely flowers.

The root is perennial, originating from a tuberous lump, then creeping horizontally, ſlender, much branched, as is alſo the ſtem, which floats under water, extending often two or three feet. The leaves, though extremely narrow and pointed, are flat, and grow alternately, ſpreading in two directions, on the ſmall branches, having long ſheathing baſes. The flowers only riſe above the water about June or July, in a ſimple ſpike, but cluſtered two or three together irregularly. Petals kidney-ſhaped, of a dull olive colour. Antheræ yellow, very diſtinctly two-lobed. Stigmas obtuſe, entire.



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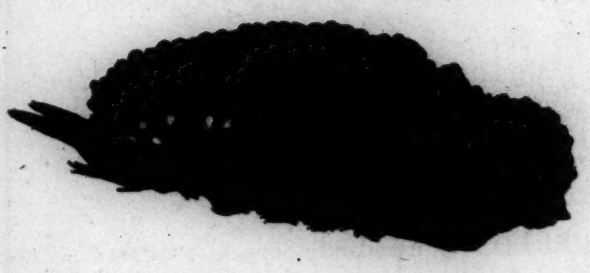
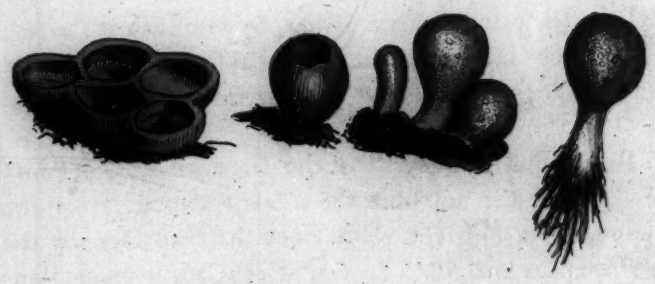




May 1796 Published by J.t Sowerby London.

TREMELLA granulata.

Granulated Tremella.

CRYPTOGAMIA Algæ.

GEN. CHAR. *Fructification* ſcarcely perceptible, in a membranous jelly-like ſubſtance.

SPEC. CHAR. Green, globular, cluſtered, membranous, containing a fluid.

SYN. Tremella granulata. *Hudſ. Fl. An.* 566. *With. Bot. Arr. v.* 3. 225. *Relh. Cant. Suppl.* 1. 26.

T. globoſa. *Weis Gotting.* 28.

T. paluſtris, veſiculis ſphæricis fungiformibus. *Dill. Muſc.* 55. *t.* 10. *f.* 17.

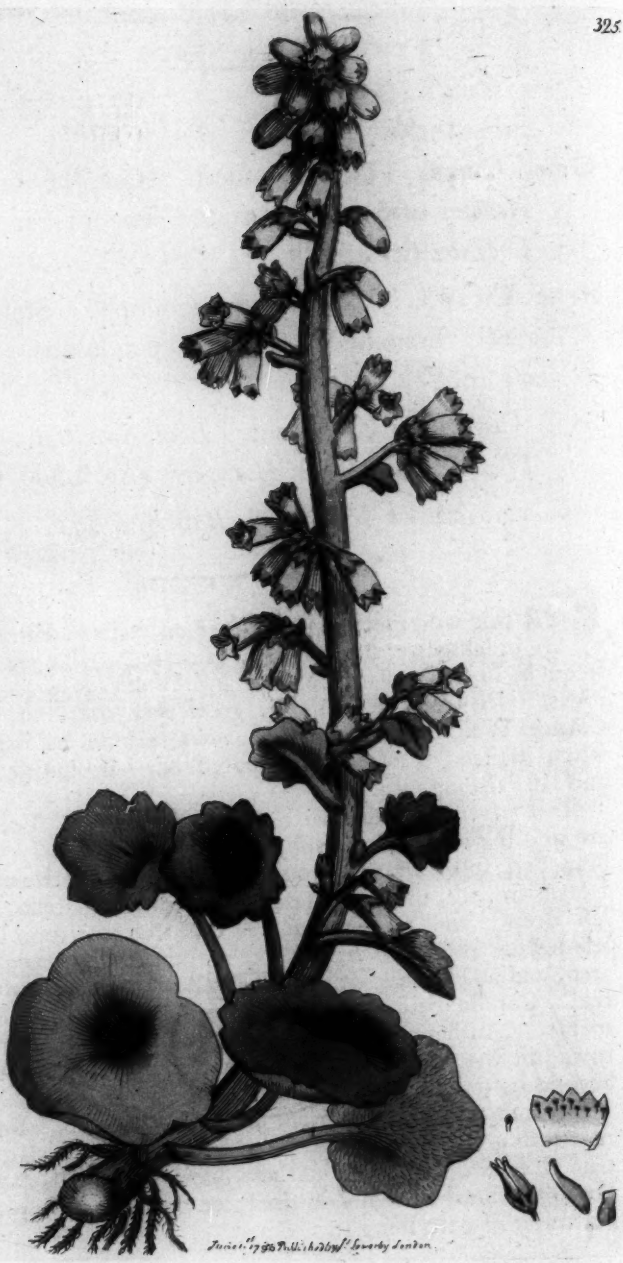
Ulva granulata. *Linn. Sp. Pl.* 1633. nec *Mant.* 136.

Lichenoides fungiforme, capitulis vel veſiculis ſphæricis aqueo humore repletis. *Raii Syn.* 70.

GATHERED very abundantly Sept. 8, 1795, at Camberwell in a pond partly dried up, alſo on the mud of ditches in that neighbourhood. It conſiſts of innumerable green globules, about the ſize of muſtard ſeed, ſeſſile at firſt, but ſoon elevated on a thick foot-ſtalk, attached to the mud by fibrous roots, but not connected with each other by any kind of cruſt or leaf. When walked upon they crackle under the feet like thin ice, and diſcharge a watery fluid; which alſo comes out ſpontaneouſly, as the plant advances in age, by an orifice at the top, and immediately afterwards the ſkin collapſes, forming a little cup with a hole in the centre. See our magnified repreſentations.

Mr. Relhan juſtly obſerves that the *Ulva granulata* of Murray's *Syſt. Veg.* taken up from the *Mantiſſa*, muſt, from the deſcription, be a different plant from that intended in the *Species Plantarum* and *Flora Suecica*, which laſt is unqueſtionably our preſent *Tremella*.

G.R. III.
BRITISH MUSEUM



Pubd. 1st 1790 by Phillips Holborn & Seward Paternoster Row London

COTYLEDON Umbilicus.

Common Navel-wort.

DECANDRIA Pentagynia.

GEN. CHAR. *Cal.* five-cleft. *Cor.* of one petal. *Nectary* of five ſcales at the baſe of the germen. *Capſules* five.

SPEC. CHAR. Leaves peltate, ſcolloped. Stem ſpiked, rarely branched. Flowers pendulous. Bracteæ entire.

SYN. Cotyledon Umbilicus. *Linn. Sp. Pl.* 615. *Hudſ. Fl. An.* 194. *With. Bot. Arr.* 463. *Sibth. Ox.* 143.

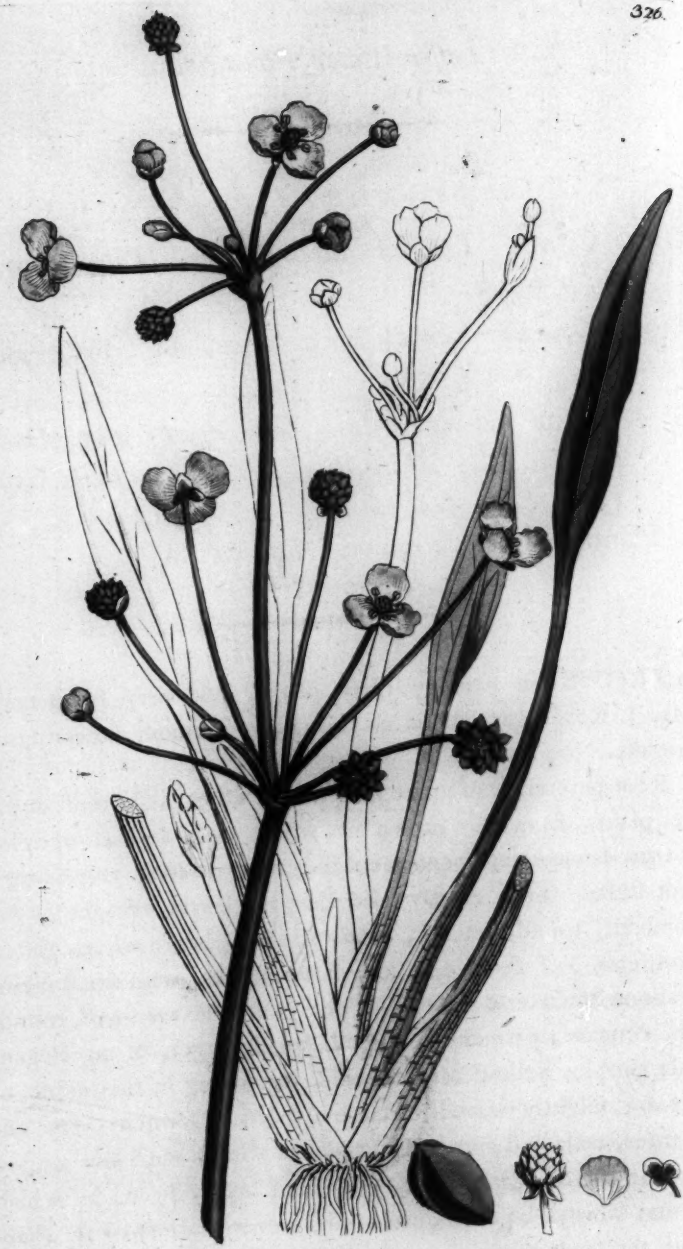
C. vera, radice tuberoſa. *Raii Syn.* 271.

FOR this wild ſpecimen, gathered on walls at Peterborough, we are indebted to the Rev. Mr. Hemſted. The plant is moſt frequent in the weſt of England and Wales, growing on moiſt rocks. In Gerarde's time it grew over the door of Poet's Corner, Weſtminſter Abbey, but was not to be found there when his ſecond edition was publiſhed. It flowers in June, and laſts through July.

Root perennial, tuberous. Stem round, very ſucculent (as are alſo the leaves), purpliſh, erect, terminating in a ſimple or branched ſpike of numerous, drooping, pale-yellow flowers. Leaves ſmooth, moſtly peltate, on longiſh foot-ſtalks, more or leſs deeply and acutely crenate, thoſe on the ſtem becoming leſs peltate and more deeply notched the higher they are ſituated, and at length changed for ſmall, lanceolate, entire bracteæ. Corolla cylindrical, the margin in five ſmall erect ſegments. Antheræ on very ſhort filaments, inſerted in two rows juſt within the orifice of the corolla, and not projecting beyond its margin.

Though this be the variety β of Linnæus, yet being by far more common than his α, we think it beſt to retain it as the true *C. Umbilicus*, as all authors have done. If the α (Mr. Hudſon's *lutea*) be really diſtinct, we ſhall take ſome other opportunity of deſcribing it.

G.R
IV.
BRITISH MUSEUM



June 1st 1796 Published as the Act directs by J. Sowerby, London.

ALISMA ranunculoides.

Leſſer Water Plantain.

HEXANDRIA Polygynia.

GEN. CHAR. *Cal.* of three leaves. *Petals* three. *Seeds* many.

SPEC. CHAR. Leaves linear-lanceolate. Fruit globoſe. Seeds acute.

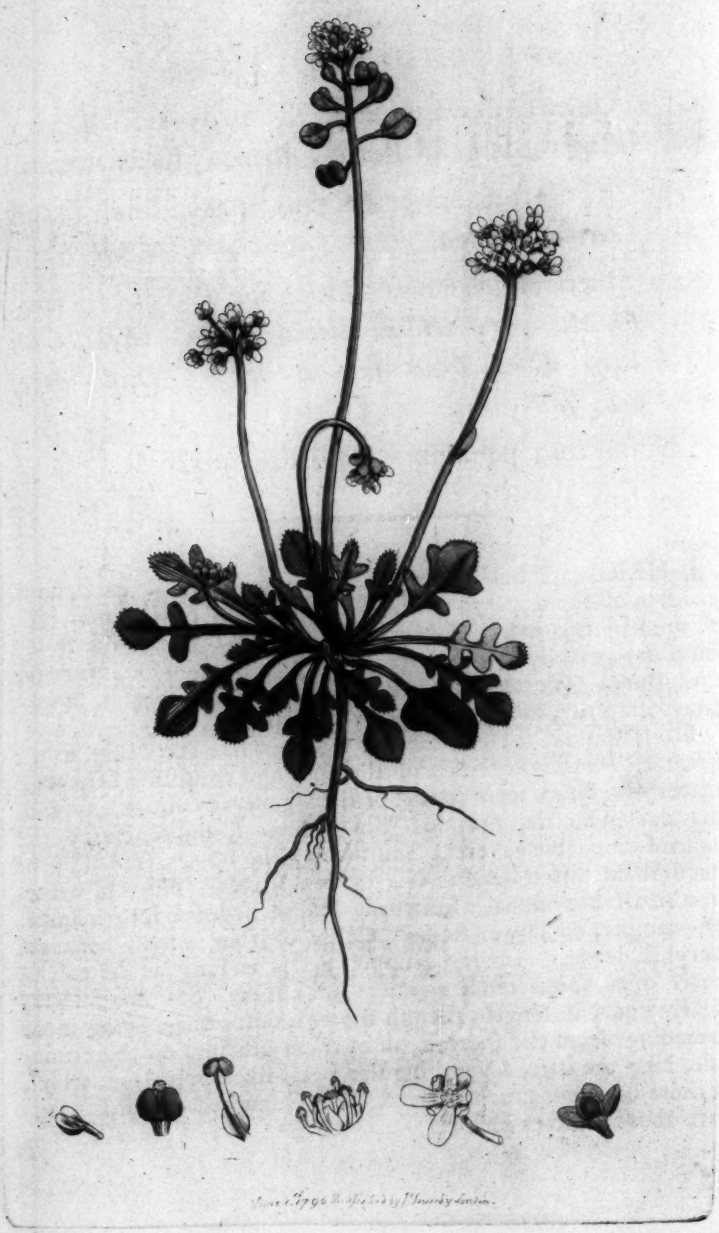
SYN. Aliſma ranunculoides. *Linn. Sp. Pl.* 487. *Hudſ. Fl. An.* 158. *With. Bot. Arr.* 382. *Relh. Cant.* 150. *Sibth. Ox.* 120.

Plantago aquatica minor. *Raii Syn.* 257.

GROWS in ſwampy turfy places, not very frequently. Mr. J. Rayer gathered it on Finchley common, flowering in Auguſt.

Root perennial, of many long ſimple fibres, as in moſt aquatic plants, from the crown of which ariſe ſeveral upright, narrow-lanceolate, ſmooth, entire leaves, on long very ſpongy foot-ſtalks. Stalk moſtly taller than the leaves, upright or decumbent, round, ſmooth, bearing two or more whorls (often proliferous) of flowers on long flower-ſtalks, with ſmall membranous bracteæ at their inſertion. Calyx-leaves ſmall, roundiſh, concave, permanent. Petals much larger, of an elegant pale purple, yellow at their baſe, expanding in the middle of the day, ſlightly waved. Stamina ſhort. Germens very numerous, collected into a ſmall globe. Seeds with five angles, and an acute point, forming a round briſtly head, by which it may always be diſtinguiſhed from every variety of A. *Plantago*, the ſeeds of which are very blunt and compreſſed.

G.R III.
BRITISH MUSEUM



June 1.1796 Published by J. Sowerby London.

IBERIS nudicaulis.

Naked-ſtalked Candy-tuft.

TETRADYNAMIA Siliculoſa.

GEN. CHAR. *Cor.* irregular, the two external petals being the largeſt. *Pouch* with many ſeeds, notched.

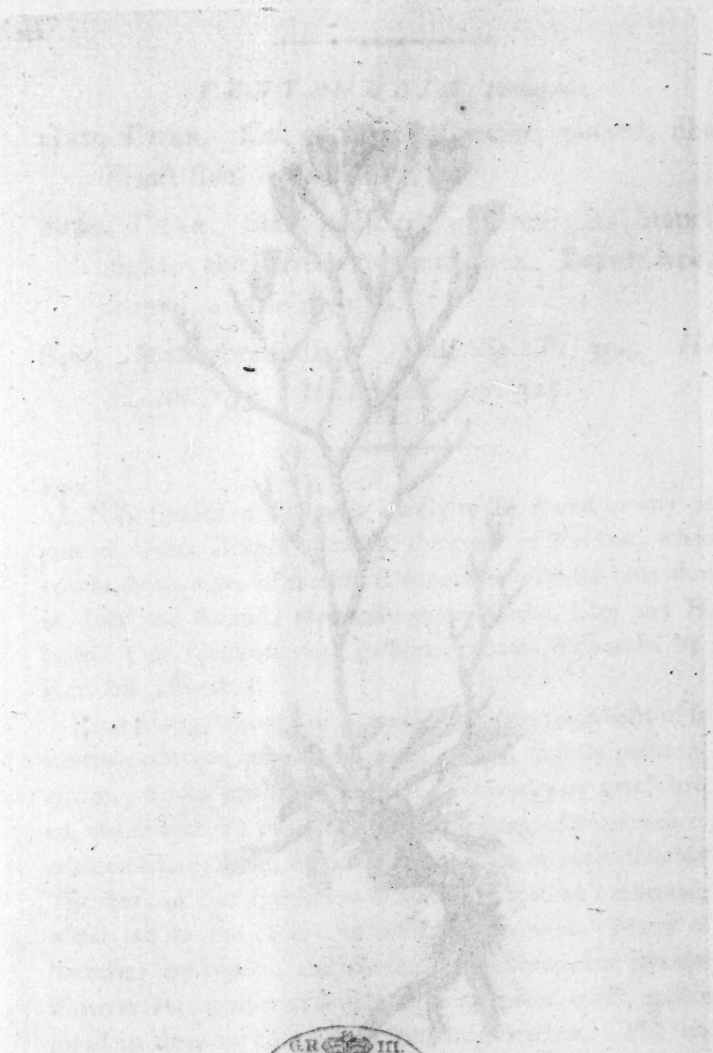
SPEC. CHAR. Stem herbaceous, naked and ſimple. Leaves ſinuated.

SYN. Iberis nudicaulis. *Linn. Sp. Pl.* 907. *Hudſ. Fl. An.* 285. *With. Bot. Arr.* 682. *Relh. Cant.* 249. *Curt. Lond. faſc.* 6. *t.* *Dickſ. Hort. Sicc. faſc.* 1. 10.

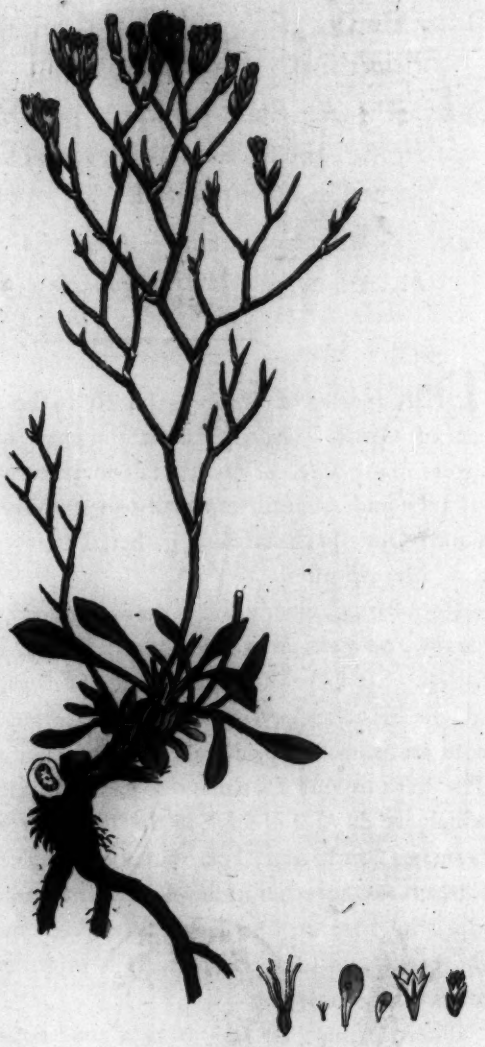
Naſturtium petræum. *Raii Syn.* 303.

THERE are but two ſpecies of *Iberis* found in Britain, neither of them very common. The *amara* has been already figured in this work, plate 52. That now before us is found on a dry gravelly ſoil in ſeveral places about London, Norwich and Bury. We received it from W. Matthew, Eſq. in flower, May 9th 1793, being quite a ſpring plant.

Root annual. Herb varying much in ſize according to the greater or leſs luxuriance of the ſoil, and conſiſting of ſeveral leaves of a lyrate form (a few of them generally entire), ſpreading flat upon the ground. Stalks ſeveral, unbranched; the central one always erect and naked, the others ſpreading or decumbent, often bearing one or two leaves. Flowers white, in a ſmall corymbus, afterwards lengthened out into a ſpike, on compreſſed flower-ſtalks. Calyx of four equal, concave, purpliſh leaves. Inner or upper petals as long as the calyx; outer ones about twice as long; all entire. Stamina all very nearly equal in length, though the two outer ones, being more ſpreading, ſeem the ſhorteſt, all of them bearing, on their inner ſide, near the baſe, a very ſingular petal-like appendage, which authors have not much noticed. Pouch curved upwards, concave above, convex below.



G.R. III.
BRITISH MUSEUM



June 1795 Published by James Sowerby London.

STATICE reticulata.

Matted Sea Lavender.

PENTANDRIA Pentagynia.

GEN. CHAR. *Cal.* of one leaf, entire, plaited, filmy. *Petals* five. *Seed* ſingle.

SPEC. CHAR. Stalk panicled, proſtrate; its branches zigzag, the barren ones bent back. Leaves wedge-ſhaped, a little pointed.

SYN. Statice reticulata. *Linn. Sp. Pl.* 394. *Hudſ. Fl. An.* 133. *With. Bot. Arr.* 327.

THIS ſpecies of *Statice* is hardly to be found in any other part of Great Britain than on the coaſt of Norfolk, where it covers many acres of muddy ſalt marſhes with its blue flowers in July and Auguſt, eſpecially about Wells, Cley and Holkham. Our ſpecimen was gathered below Wiſbeach, by the Rev. Mr. Hemſted.

Root ſtrong, woody and perennial, bearing thick tufts of ſmall, narrow, obovate, or wedge-ſhaped, leaves, ſlightly pointed, and entire. Stalks proſtrate, deſtitute of leaves, very much branched, the branches zigzag, matted and entangled with each other, with an ovate, ſharp, membranous bractea at each divarication. The bark in our ſpecimens is a little criſped and tuberculated, which we do not obſerve in the Linnæan ones. Many of the branches are barren, and thoſe often reflexed, but not always. Flowers few together in ſimple terminal ſpikes, erect, each enveloped in three or four larger ſheathing bracteæ. The ribs of the calyx, and the petals, are of a bright purpliſh blue, which turns white in drying.

There cannot be ſaid to be a good figure of this plant extant. Plukenet's *t.* 42. *f.* 4. is moſt like S. *echioides*, and Boccone's *Sic. t.* 44. is too imperfect to be of any ſervice.

STATICE reticulata.

Matted Sea Lavender.

PENTANDRIA Pentagynia.

Gen. Char. Cal. of one leaf, entire, plaited, flimsy. Petals five. Seed single.

Spec. Char. Stalk panicled, prostrate; its branches zigzag, the barren ones bent back. Leaves wedge-shaped, a little pointed.

Syn. Statice reticulata. Linn. Sp. Pl. 394. Fl. Fl. Pl. 4to. 133. Web. Bot. Arv. 327.

THIS species of Statice is hardly to be found in any other part of Great Britain than on the coast of Norfolk, where it covers many acres of muddy salt marshes with its blue flowers in July and August, especially about Wells, Cley and Holkham. Our specimen was gathered below Withcock, by the Rev. Mr. Hemsted.

Root strong, woody and perennial, leaving thick tufts of small, narrow, obovate, or wedge-shaped leaves, slightly pointed, and entire. Stalks prostrate, destitute of leaves, very much branched, the branches zigzag, matted and entangled with each other, with an ovate sharp, membranous bract at each divarication. The bark in our specimens is a little crisped and tuberculated, which we do not observe in the Linnæan ones. Many of the branches are barren, and thole often reflexed, but not always. Flowers few together in simple terminal spikes, erect, each enveloped in three or four larger membranous bractæ. The tribs of the calyx, and the petals, are of a bright purplish blue, which turns white in drying.

There cannot be faid to be a good figure of this plant extant. Plukenet's t. 42. f. 4. is moft like S. reticulata, and Boccone's fig. t. 44. is too imperfect to be of any fervice.

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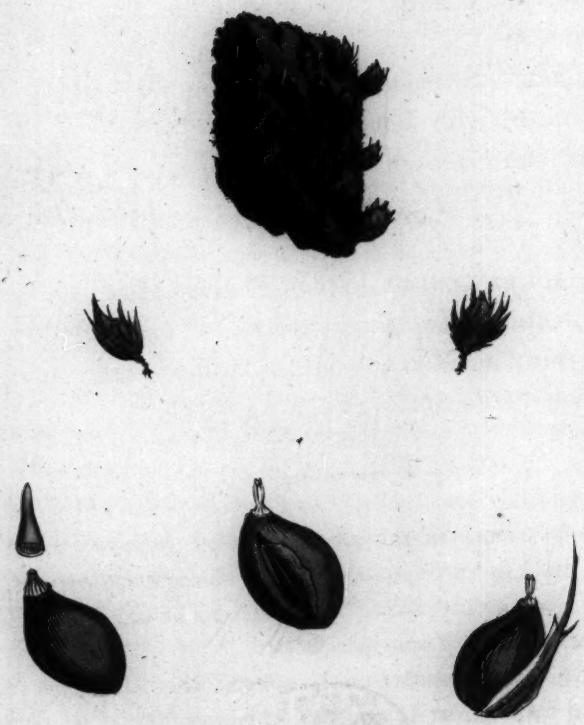
III.



June 1st 1796 Published by J.t Sowerby London.

BUXBAUMIA foliosa.

Leafy Buxbaumia.

CRYPTOGAMIA Muſci.

GEN. CHAR. *Capſule* oblique, membranous on one ſide, gibbous on the other, with a lid. *Veil* deciduous.

SPEC. CHAR. Stem none. Capſule nearly ſeſſile, ſurrounded with leaves.

SYN. Buxbaumia foliosa. *Linn. Fil. Meth. Muſc.* 33. *t.* 1. *f.* 4. *With. Bot. Arr. v.* 3. 77. *Dickſ. H. Sicc. faſc.* 2. 20.

Phaſcum montanum. *Hudſ. Fl. An.* 466.

P. maximum. *Lightf. Scot.* 693.

Sphagnum acaulon maximum, foliis in centro ciliaribus. *Dill. Muſc.* 253. *t.* 32. *f.* 13.

OUR ſpecimens of this rare moſs were gathered by T. F. Forſter, jun. Eſq. in September 1794, on the rocks near Hamſil forge (commonly called Harriſon's rocks), and on Eridge rocks, Suſſex, near Tunbridge-Wells.

It grows in little patches on the upright ſtone, but each plant is ſeparate from the reſt, conſiſting of ſeveral erect leaves, the inner ones long-pointed, embracing a ſolitary nearly ſeſſile capſule, which is oblique, the top pointing upwards; its orifice is ciliated with ſeveral white permanent teeth. Lid conical, with a little conſtriction in the middle. The veil we have not ſeen. The obliquity of the capſule forms its moſt obvious generic character.

G.R. III.
BRITANNICUS MUSEUM

June 1. 1798 Published by J.T. Sowerby, London.

PHASCUM curvicollum.

Crooked Phaſcum.

CRYPTOGAMIA Muſci.

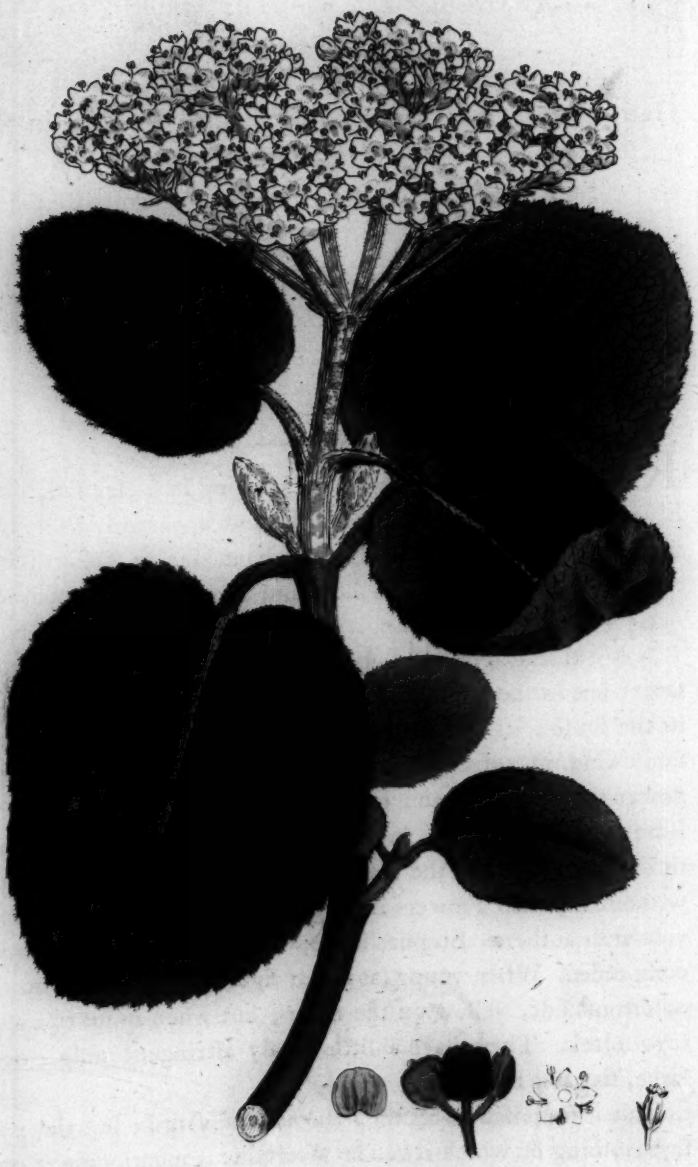
GEN. CHAR. *Capſule* with a lid, the mouth ciliated. *Veil* minute, deciduous.

SPEC. CHAR. Stem none. Capſules on curved ſtalks. Leaves ovato-lanceolate, acuminated, ſpreading.

SYN. Phaſcum curvicollum. *Dickſ. Crypt. faſc.* 2. 1. *With. Bot. Arr. v.* 3. 73. *Relh. Cant. faſc.* 3. 8.

GATHERED by the Rev. Mr. Hemſted on a dry bank near Newmarket; Mr. Dickſon found it on barren graſſy ſpots near Croydon. It ripens its fruit in April or May, and may probably be not uncommon, though ſo minute as to be rarely perceived.

Each plant is ſimple, with a fibrous root, a few lanceolate, entire, pointed, pellucid, ſpreading leaves, which vary in breadth, and from the centre of which ariſes a ſhort, reddiſh, curved and recurved ſtalk, bearing a roundiſh capſule of the ſame colour. The lid aſcends obliquely. The veil is more conſiderable and permanent than the generic character ſeems to require, nor can we diſcover any ſatisfactory reaſon why this plant ſhould not be eſteemed a *Bryum*, though for the preſent we leave it where the moſt accurate judges have placed it, at leaſt till ſome more ſolid generic characters of moſſes can be diſcovered.



VIBURNUM Lantana.

Mealy Guelder-roſe, or Way-faring Tree.

PENTANDRIA Trigynia.

GEN. CHAR. *Cal.* ſuperior, of five leaves. *Cor.* in five ſegments. *Berry* with one ſeed.

SPEC. CHAR. Leaves heart-ſhaped, ſerrated, veiny, downy beneath.

SYN. Viburnum Lantana. *Linn. Sp. Pl.* 384. *Hudſ. Fl. An.* 129. *With. Bot. Arr.* 318. *Relh. Cant.* 126. *Sibth. Ox.* 104.

Viburnum. *Raii Syn.* 460.

RAY mentions this ſhrub as growing in a clay ſoil. We have obſerved it moſt plentifully, and apparently in its true wild ſituation, in chalky places, as about Henley, Oxfordſhire; not but that it occurs alſo here and there in the woods and hedges of moſt parts of England, flowering in May.

It is a thickly-branched ſhrub or ſmall tree, growing to a larger ſize in the north of England (as Ray alſo remarks) than in the ſouth; its twigs round, pliant, and mealy, with the ſame kind of tufted ſtellated pubeſcence as is found on the flower-ſtalks, backs, and even upper ſides of the leaves. The leaves are oppoſite, as in the whole genus, ſomewhat elliptical, heart-ſhaped at the baſe, obtuſe, ſerrated, ſtrongly veined, without ſtipulæ. Flowers in large terminal cymes, white, with yellowiſh antheræ. Stigmas ſeſſile, very ſhort and thick. Berries compreſſed. When young (as in our figure) they are red on the outermoſt ſide, yellow on the other; but when quite ripe they turn black. They have a little mealy aſtringent pulp. Seed large, flat and furrowed.

This is ſuppoſed to be the *Viburnum* of Virgil; but the poet ſays nothing by which it can be aſcertained, mentioning it only in his 1ſt eclogue, ver. 26.

The leaves turn dark red in autumn.

VIBURNUM Lantana.

Mealy Guelder-rose, or Nay-leaving Tree.

PENTANDRIA Trigynia.

GEN. CHAR. Cal. tiphyon, of five leaves. Cor. in five segments. Berry with one seed.

SPEC. CHAR. Leaves heart-shaped, serrated, veiny, downy beneath.

SYN. Viburnum Lantana. Linn. Sp. Pl. 392. Fl. Suec. 171. Am. Acad. 1751. 327. Fl. Dan. Clem. 142. Sibth. Ox. 104.

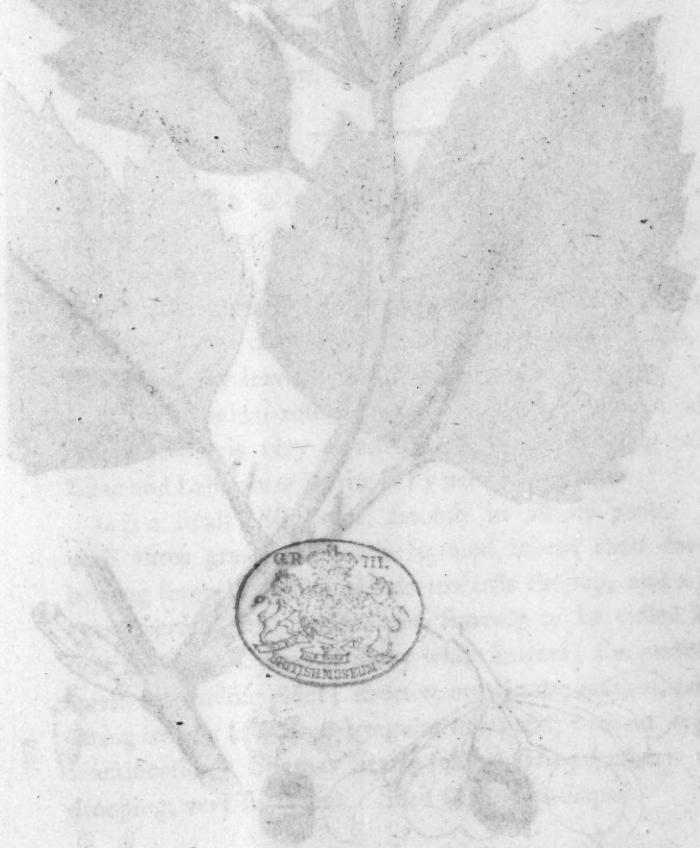
Viburnum. Dod. Pyr. 460.

RAY mentions this shrub as growing in a clay soil. We have observed it most plentifully, and apparently in its true wild situation, in chalky places, as about Henley, Oxfordshire; not but that it occurs also here and there in the woods and hedges of most parts of England, flowering in May.

It is a thickly branched shrub or small tree, growing to a larger size in the north of England (as Ray also remarks) than in the south; its twigs round, pilose, and downy, with the same kind of rufted pubescence as is found on the flower-stalks, backs, and even upper sides of the leaves. The leaves are opposite; as in the whole genus, roundish elliptical, heart-shaped at the base, obtuse, serrated, finely veined, without lipulæ. Flowers in large terminal corymbs, white, with yellowish anthers. Stigmas fringe-like, very short and thick. Berries compressed. When young (as in our figure) they are red on the outermost side, yellow on the other; but when quite ripe they turn black. They have a little mealy astringent pulp. Seed large, flat and furrowed.

This is supposed to be the Viburnum of Virgil; but the poet says nothing by which it can be ascertained, mentioning it only in his 1st eclogue, ver. 26.

The leaves turn dark red in autumn.


G.R. III.
BRITISH MUSEUM

Jubet. 1. 1798. Published by J. Sowerby London.

VIBURNUM Opulus.

Common Guelder-roſe, or Water Elder.

PENTANDRIA Trigynia.

GEN. CHAR. *Cal.* ſuperior, of five leaves. *Cor.* in five ſegments. *Berry* with one ſeed.

SPEC. CHAR. Leaves lobed; their foot-ſtalks ſet with glands.

SYN. Viburnum Opulus. *Linn. Sp. Pl.* 384. *Hudſ. Fl. An.* 130. *With. Bot. Arr.* 318. *Relh. Cant.* 127. *Sibth. Ox.* 104.

Opulus. *Raii Syn.* 460.

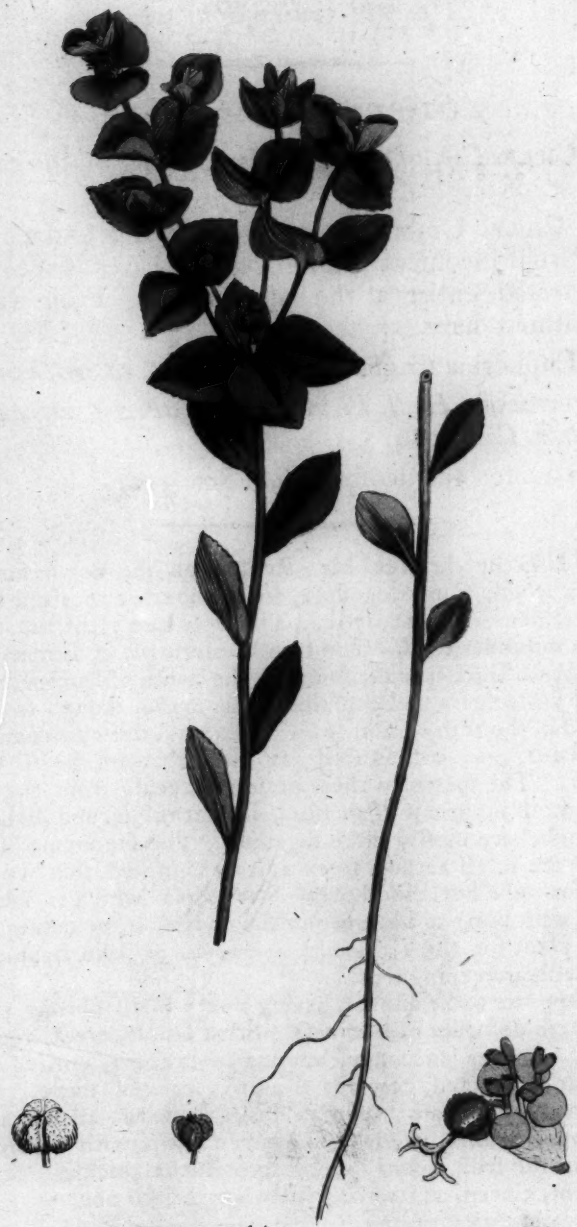
THIS ſhrub is common in woods and hedges in watery places, flowering early in June; the bright-red berries ripen about September, and towards the middle of October the leave aſſume a beautiful pink-colour, affording another inſtance, in addition to that of the Cornel (ſee tab. 249), of a genus, moſtly American, the leaves of which turn red in autumn. In gardens the Guelder-roſe, bearing round bunches of abortive flowers only, is very common, elegantly grouping with the Lilac and Laburnum in the early part of ſummer.

It is a ſmall buſhy tree, ſmooth in all its parts. Leaves with three great, unequally ſerrated, lobes; their foot-ſtalks bearing ſeveral cup-like glands towards the top, and a pair or two of erect linear appendages, ſcarcely to be called ſtipulæ, near the baſe. Cymes of many white flowers; the perfect ones ſmall, reſembling elder; abortive ones in the margin, each conſiſting merely of a large irregular flat petal, without organs of fructification. Stigmas nearly ſeſſile, cloſe together. Berries drooping, very ſucculent. Seed flat, heart-ſhaped.

VIBURNUM Opulus.

Common Guelder-rose, or Water Elder.

G.R. III.



July 1st 1798 Published by Jas Sowerby London.

EUPHORBIA ſtricta.

Upright warty Spurge.

DODECANDRIA Trigynia.

GEN. CHAR. *Cor.* of 3 or 4 petals, ſtanding on the calyx. *Cal.* of one leaf, inflated. *Capſ.* 3-lobed.

SPEC. CHAR. Umbel of 4 or 5 rays, 3-cleft and cloven. Partial involucra nearly ovate. Leaves lanceolate, ſerrated, entire at the baſe, ſmooth. Fruit warty, without hairs.

SYN. Euphorbia ſtricta. *Linn. Syſ. Nat. ed.* 10. 1049.

E. verrucoſa. *Hudſ. Fl. An.* 209. *With. Bot. Arr.* 497. *Relh. Cant.* 186.

Tithymalus verrucoſus. *Raii Syn.* 312.

FOUND by the Rev. Mr. Relhan on the north ſide of Everſden wood, Cambridgeſhire, from whom we received freſh wild ſpecimens Aug. 10, 1795. This very rare plant has been hitherto miſunderſtood. The true E. *verrucoſa* of Linnæus is a perfectly diſtinct ſpecies, found in the ſouth of Europe, with very hairy involucra and capſules. His *ſtricta*, though ſo well deſcribed in the 10th edition of *Syſt. Nat.* was afterwards omitted by Linnæus, and confounded (as his herbarium ſhews) with *verrucoſa*. The ſpecimen there preſerved, being from the Levant, is more luxuriant than ours, ſo that the ſecond diviſions of the umbel are moſtly three together. The ſynonyms of the *verrucoſa* are in all authors ſo exceſſively confuſed, that we can anſwer for none but the above. Ray ſeems (which is ſeldom the caſe with him) to have begun the confuſion, by taking this Engliſh plant for the *Tithymalus verrucoſus* of John Bauhin, a ſpecies with a creeping root.

Ours appears to be annual, having a very ſmall fibrous root. Whole herb deſtitute of hairineſs. Stem ſimple, erect, round, purpliſh. Leaves lanceolate, varying in breadth, entire, and ſomewhat contracted, towards the baſe, ſerrated above. General involucra ovate; partial heart-ſhaped; all ſerrated. Petals round, entire, yellow. Germen clothed with tubercles, which as the fruit ripens become prominent prickles. Styles permanent, cloven, united half their length into one.

G.R. III.
BRITISH MUSEUM

July 1st 1795 Published by J.t Sowerby London.

VICIA ſativa.

Common Vetch.

DIADELPHIA Decandria.

GEN. CHAR. *Stigma* tranſverſely bearded on the lower ſide.

SPEC. CHAR. Pods ſeſſile, nearly upright, generally in pairs. Lower leaves blunt. Stipulæ marked with a diſcoloured depreſſion on the under ſide.

SYN. Vicia ſativa. *Linn. Sp. Pl.* 1037. *Hudſ. Fl. An.* 318. *With. Bot. Arr.* 776. *Relh. Cant.* 274. *Sibth. Ox.* 224.

Vicia. *Raii Syn.* 320.

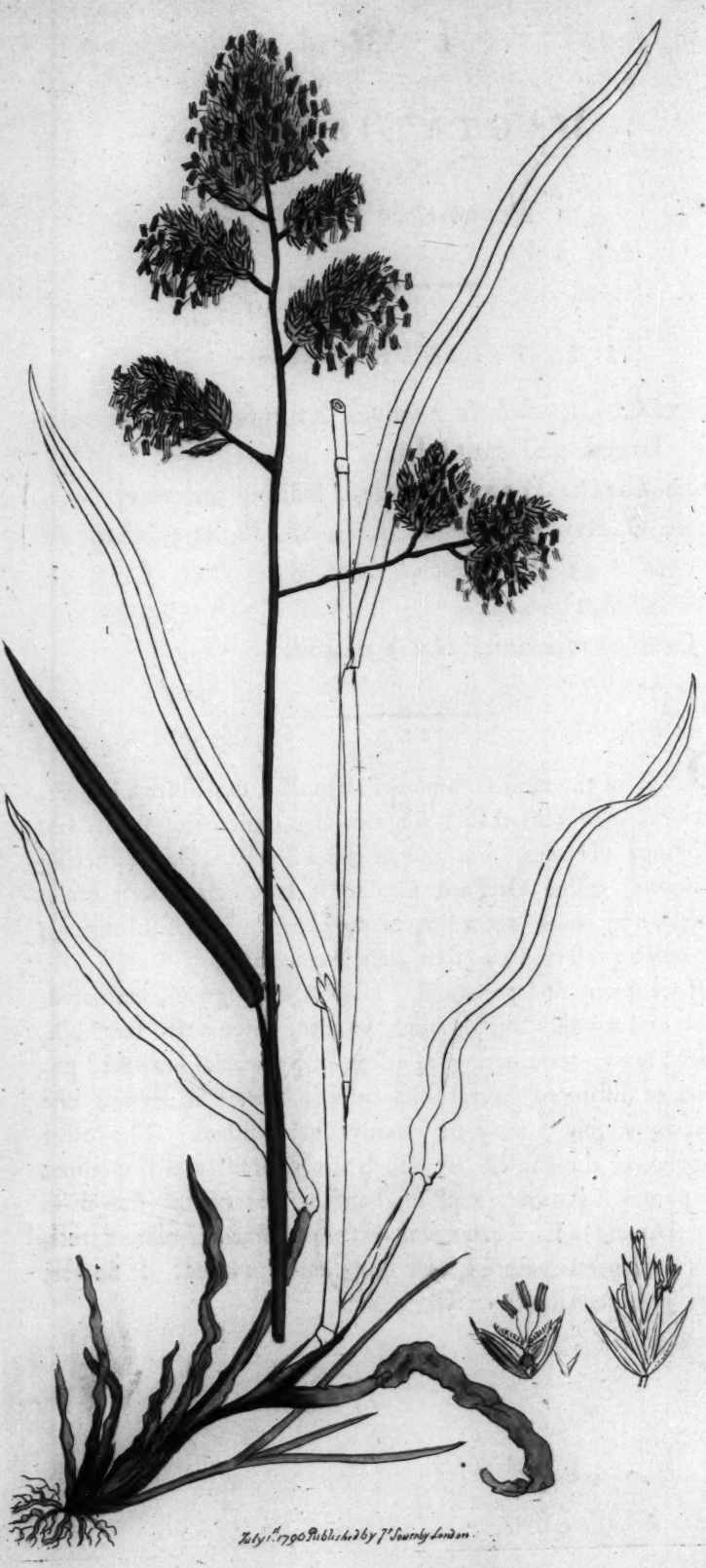
THIS is a wild ſpecimen of the common *Vicia ſativa*, ſo called becauſe it is cultivated as an early fodder for cattle in various parts of Europe, and the ſeeds are the food of pigeons. It varies much in ſize, and in the form as well as breadth of the leaves, which are ſometimes inverſely heart-ſhaped, ſometimes (at leaſt the upper ones) of an elliptic-lanceolate form. It is eaſily known by the depreſſed mark on the ſtipulæ, which looks as if made with a hot iron, and varies in colour from black to brown, and even yellow. The root is annual. Stems weak, procumbent if the tendrils meet with nothing to cling to for ſupport, angular and furrowed, as are alſo the common foot-ſtalks of the leaves. Flowers in ſhades of elegant purple. The pods are more generally horizontal than erect.

Mr. Hudſon's variety β of his V. *lathyroides* is generally agreed to be a variety of the *ſativa*. Its pods are erect, black, cylindrical—the flowers deep red. We have received it from Weymouth by favour of Sir Thomas Cullum. The α of V. *lathyroides* Hudſ. ſeems to be the more common variety of *ſativa* mentioned in Withering; but their ſynonyms are not very eaſily to be aſcertained.

VICIA. Sativa.

Common Vetch.

G R III
BUTTERWORTH



July 1st 1790 Published by J.t Sowerby London

DACTYLIS glomerata.

Rough Cock's-foot Graſs.

TRIANDRIA Digynia.

GEN. CHAR. *Cal.* of 2 valves, compreſſed; one valve larger, and carinated.

SPEC. CHAR. Panicle crowded, leaning one way.

SYN. Dactylis glomerata. *Linn. Sp. Pl.* 105. *Hudſ. Fl. An.* 43. *With. Bot. Arr.* 94. *Relh. Cant.* 39. *Sibth. Ox.* 43.

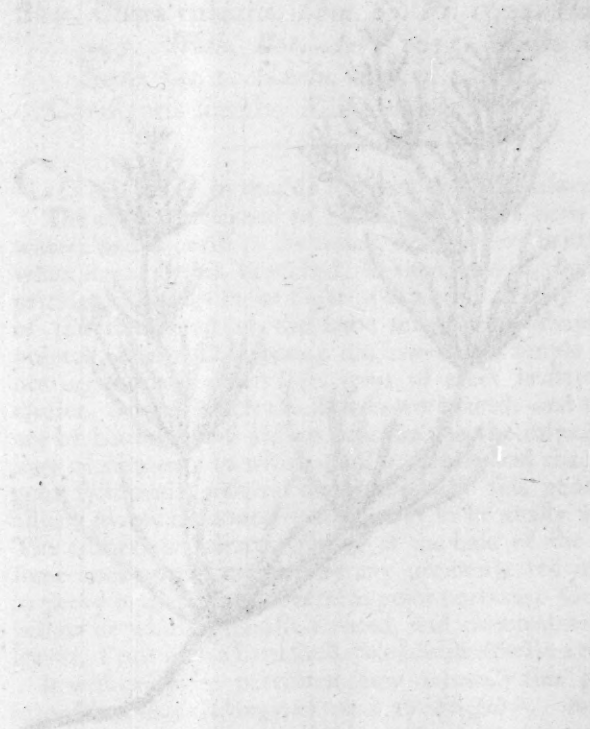
Gramen aſperum. *Raii Syn.* 400.

ONE of the moſt common of all graſſes, in paſtures, hedges, thickets, &c. remarkable for thriving under the ſhade and drippings of trees, and thence ſometimes (as Dr. Withering mentions) called Orchard Graſs. It is a harſh coarſe graſs, not eaten by cows (according to the experiments of Linnæus), nor much preferred by other domeſtic animals.

Root ſtrong and perennial. Leaves dark green, carinated, harſh and rough. Stipula bifid, or torn. Stems two feet high, rough, leafy, terminating in a ſort of pyramidal branched panicle, conſiſting of ſeveral thick tufts of flowers all leaning one way, by which it may be readily diſtinguiſhed. The lower branches of the panicle are much divaricated, and ſometimes compound. Antheræ reddiſh, hanging out of the flower on long filaments. Each calyx contains three, four, or more florets, with both petals pointed, and one ſhortly awned. It flowers from June to Auguſt.

DACTYLIS glomerata.

Rough Cock's-foot Grass.



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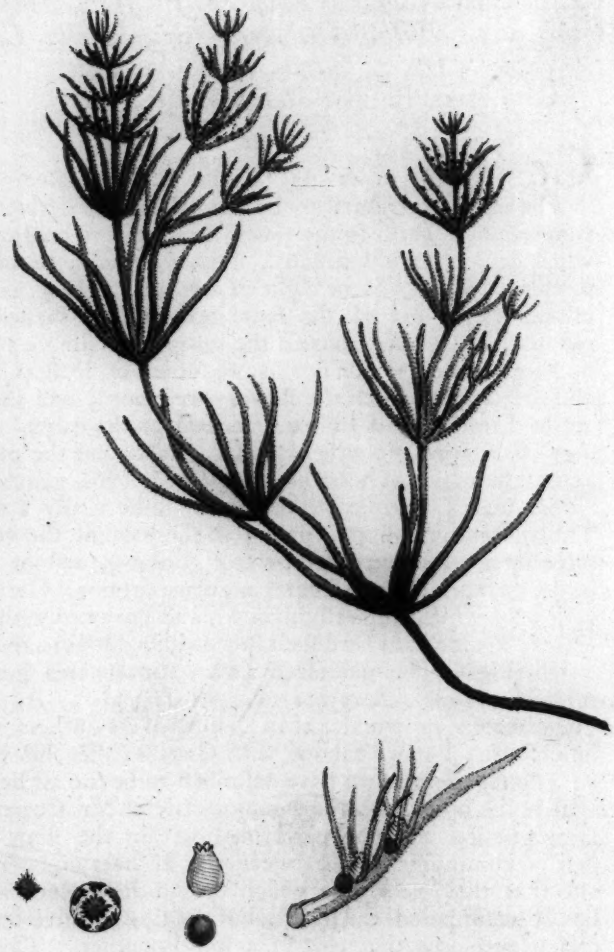


1796 Published by J. Sowerby

CHARA vulgaris.

Common Chara.

MONANDRIA Monogynia.

GEN. CHAR. *Cal.* none. *Cor.* none. *Anthera* ſeſſile. *Style* none. *Berry* with many ſeeds.

SPEC. CHAR. Stem and leaves rough, ſtriated, without prickles. Leaves and leaflets tapering, channelled above, not jointed.

SYN. Chara vulgaris. *Linn. Sp. Pl.* 1624. *Hudſ. Fl. An.* 397. *With. Bot. Arr.* 1015. *Relh. Cant.* 345. *Sibth. Ox.* 1. *Gærtn. Sem. v.* 2. *t.* 84.

C. vulgaris fœtida. *Raii Syn.* 132.

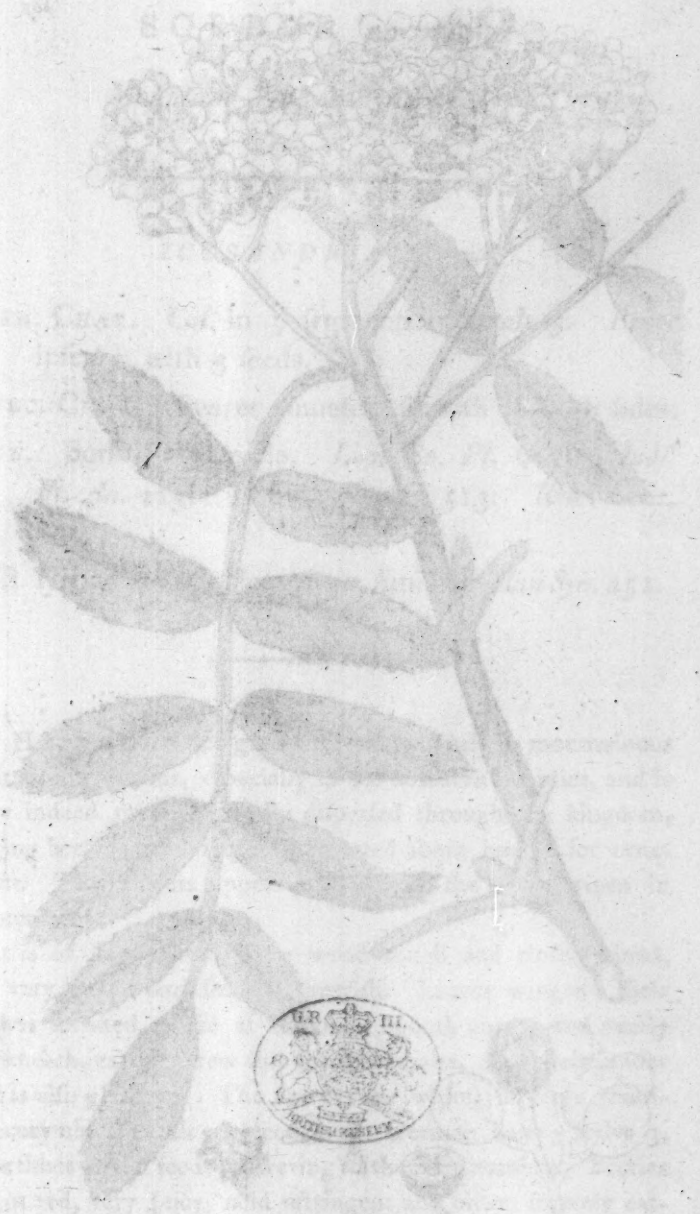
COMMON in muddy ſtagnant ditches, flowering in July. The root is preſumed to be annual. The herb floats under water, and is harſh to the touch, fœtid; very brittle and gritty when dry. Stems branched, ſtriated, rough, but deſtitute of prickles. Leaves ſix or eight in a whorl, as long as the joints of the ſtem, and of the ſame texture, awl-ſhaped, narrow, pointed, channelled above; the lower ones ſimple; the others bearing on their upper ſides rows of erect leaflets, four in a cluſter, among which the flowers are placed, and theſe leaflets are by Linnæus and Juſſieu deſcribed as the calyx. The analogy of *Hippuris*, to which (as Dr. Stokes and the moſt intelligent ſyſtematic writers have obſerved) this genus is nearly allied, makes us conceive the flower to be really a naked one. The anthera is ſolitary, ſitting at the baſe of the germen (or ſometimes unaccompanied by any germen), red or yellowiſh, in decay cracking into ſeveral angular portions. Germen ovate, yellow or whitiſh, ſpirally ſtriated, and crowned with five little leaves. Fruit with a hard ſhell. Seeds imbedded in a reddiſh pulp.

It will eaſily be perceived how naturally this genus comes into *Monandria Monogynia* next to *Hippuris*. As it flowers under water, no wonder if the nature of its anthera and pollen be obſcure; but we cannot with Gærtner (ſee his preface, p. 33.) doubt the part we have deſcribed to be the anthera.

It is the opinion of our ingenious friend Mr. Correa, that the impregnation may be performed within the ſtem by a clandeſtine communication between the anthera and germen, and alſo that the five leaves which crown the germen are not (as has been ſuppoſed) the ſtigma, but the tips of a five-leaved calyx cloſely enfolding that part in a ſpiral manner. This merits a farther enquiry.

CHARA vulgaris.

Common Chara.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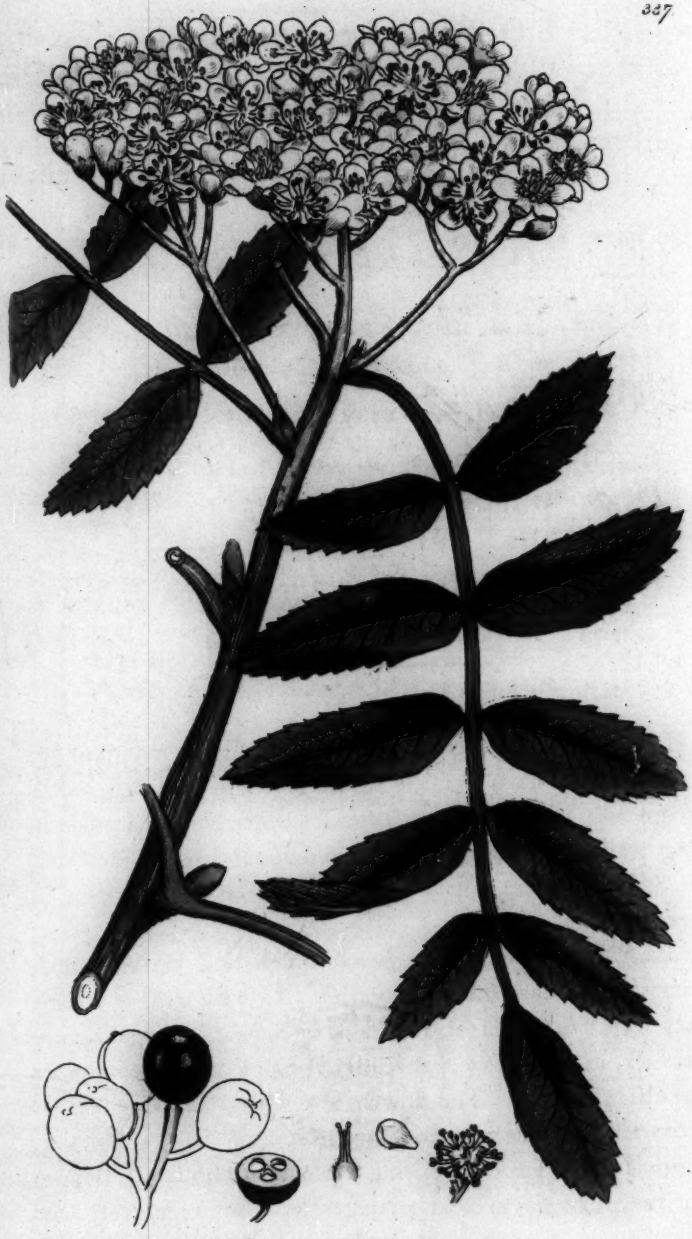


Aug.st 1. 1706 Published by J.t Sowerby London.

SORBUS aucuparia.

Mountain Aſh, or Quicken Tree.

ICOSANDRIA Trigynia.

GEN. CHAR. *Cal.* in 5 ſegments. *Petals* 5. *Berry* inferior, with 3 ſeeds.

SPEC. CHAR. Leaves pinnated, ſmooth on both ſides.

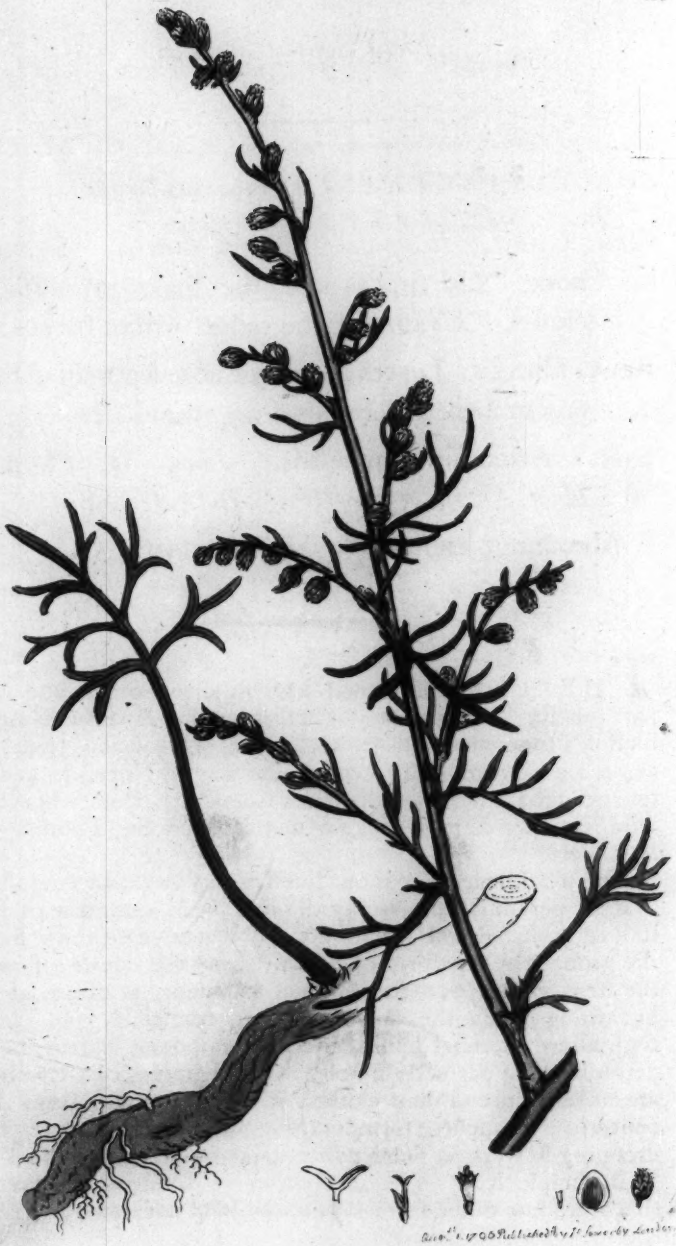
SYN. Sorbus aucuparia. *Linn. Sp. Pl.* 683. *Hudſ. Fl. An.* 215. *With. Bot. Arr.* 513. *Relh. Cant.* 190.

S. ſylveſtris, foliis domeſticæ ſimilis. *Raii Syn.* 452.

THIS elegant tree grows very abundantly in mountainous (not alpine) woods, eſpecially in the northern counties, and is now indeed pretty generally diſperſed through the kingdom, having been ſo very frequently planted about houſes for ornament. The flowers appear in May, and the berries ripen in September.

It is of ſlow growth; the wood tough and cloſe-grained, not very hard; bark ſmooth, greyiſh. Leaves winged; their leaflets ſerrated, entire at the baſe, ſmooth above, and nearly ſo beneath, except a few fine ſcattered hairs, and their under ſide is alſo glaucous. The flowers are white, in large terminal corymbi. Petals very concave. Germen hairy; ſtyles 3, ſometimes 4, the ſeeds anſwering to them in number. Berries bright red, very juicy, acid aſtringent and bitter, ſcarcely eatable when raw, though a not unpleaſant jelly is prepared from them in the Highlands with ſugar.

G.R. III.



ARTEMISIA campeſtris.

Field Southernwood.

SYNGENESIA Polygamia-ſuperflua.

GEN. CHAR. *Receptacle* ſlightly downy. *Seed-down* none. *Cal.* imbricated, the ſcales roundiſh and cloſed. *Flowers* of the radius without a corolla.

SPEC. CHAR. Leaves in many linear ſegments. Stems procumbent before flowering, wand-like.

SYN. Artemiſia campeſtris. *Linn. Sp. Pl.* 1185; *Hudſ. Fl. An.* 357. *With. Bot. Arr.* 889.

Abrotanum campeſtre. *Raii Syn.* 190.

THE field ſouthernwood has hitherto been found in no part of England but about Thetford, where it was diſcovered in Ray's time, and ſtill grows by the ſide of the great road about a mile from that town in the way to Norwich, and alſo on Icklingham heath, eight miles from Bury, from whence the wild ſpecimen here delineated was ſent by Sir Thomas Cullum, Bart.

The whole herb is without ſmell, and flowers in Auguſt.

Root perennial, producing the firſt year a number of long-ſtalked pinnated and deeply divided leaves, ſpreading flat on the ground in the form of a ſtar; from the centre of which the ſtem comes out the ſummer following, proſtrate at firſt, but riſing when the flowers appear, branched, and clothed with alternate, more ſeſſile, and leſs compound leaves, the uppermoſt being perfectly ſimple. The ſegments of all the leaves are linear, more or leſs clothed with cloſe-preſſed ſilky hairs beneath. Branches forming long ſimple racemes of ſmall drooping flowers on ſlender foot-ſtalks, each accompanied by a ſmall ſimple leaf. The receptacle, as Linnæus obſerves, in this and ſome other ſpecies, is naked, and not downy.

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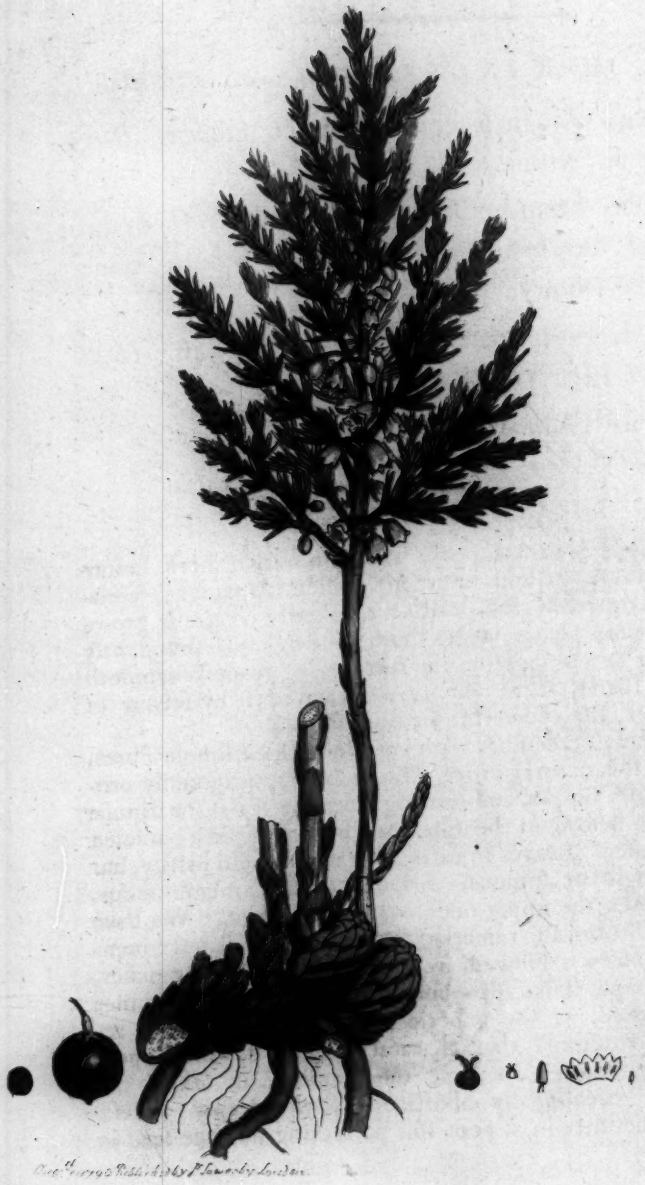

Oct.r 11 1792 Published by P. Stewart, London.

ASPARAGUS officinalis.

Common Aſparagus.

HEXANDRIA Monogynia.

GEN. CHAR. *Cor.* in 6 ſegments, erect, inferior. *Berry* of 3 cells, with 2 ſeeds in each.

SPEC. CHAR. Stem herbaceous, generally erect, round. Leaves briſtle-ſhaped, flexible. Spines none. Stipulæ ſolitary.

SYN. Aſparagus officinalis. *Linn. Sp. Pl.* 448. *Hudſ. Fl. An.* 145. *With. Bot. Arr.* 352.

Aſparagus. *Raii Syn.* 267.

FEW perſons would ſuppoſe the diminutive herb before us to be the origin of our luxuriant garden Aſparagus, commonly called Sparrow-graſs, and very vulgarly *Graſs*. It grows wild in maritime places in the ſouth of England, abundantly on the pebbly beach oppoſite the ferry going from Weymouth to Portland Iſland, from whence we received it by favour of A. B. Lambert, Eſq. flowering in Auguſt.

Root perennial, creeping, with very long thick ſimple fibres, as in moſt of this natural order. Stem erect, occaſionally procumbent, round, ſimple, and bearing alternate ſcales (or ſtipulæ without leaves below, in the upper part branching in a panicled alternate manner. Leaves in tufts, very narrow and briſtly, but flexible, not rigid or ſpinous. Stipulæ ſolitary, membranous, triangular, acute, the upper ones ovate and jagged. We have never (as Dr. Stokes alſo remarks) found the inner ſtipulæ mentioned by Linnæus. Flowers from the axillæ of the branches, on capillary ſimple ſtalks, drooping. Not finding their inner ſegments reflexed, as the generic character of Linnæus requires, we have altered that character. The flowers appear hermaphrodite, though in ſome the ſtamina, in others the piſtillum, are occaſionally abortive. Style deeply 3-cleft. Berry red, ſometimes in a poor ſoil perfecting but one ſeed in each cell.

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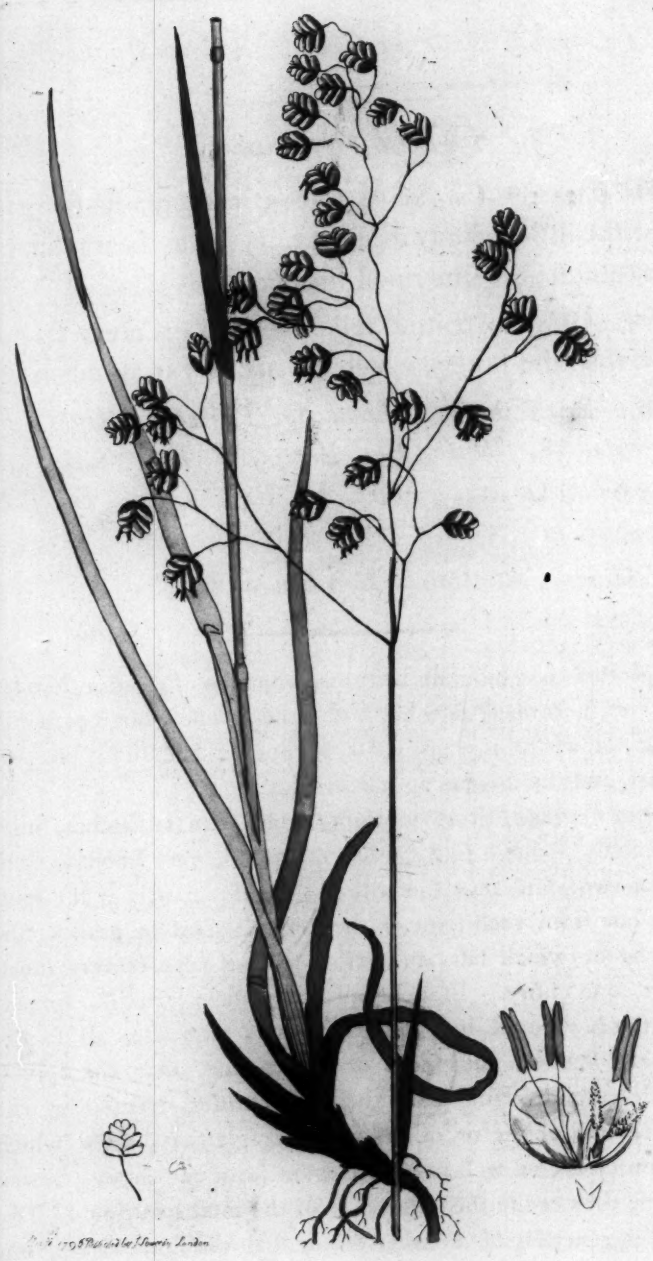

Pubd 1 Oct 1798 by J. Sowerby London

BRIZA media.

Common Quaking-Graſs, or Cow-Quakes.

TRIANDRIA Digynia.

GEN. CHAR. *Cal.* of 2 valves, with many flowers; the little ſpike two-ranked, its valves heart-ſhaped, obtuſe, the innermoſt ſmaller.

SPEC. CHAR. Little ſpikes ovate. Calyx ſhorter than the florets, which are about 7 in number.

SYN. Briza media. *Linn. Sp. Pl.* 103. *Hudſ. Fl. An.* 38. *With. Bot. Arr.* 92. *Relh. Cant.* 38. *Sibth. Ox.* 43. *Mart. Fl. Ruſt. t.* 39. *Dickſ. H. Sicc. faſc.* 5. 2.

Gramen tremulum. *Raii Syn.* 412.

VERY common in paſtures, where, as Profeſſor Martyn obſerves, it is made into hay with other graſſes, but never cultivated alone for any particular purpoſe. The roots are perennial, and the flowers appear in May.

Root fibrous. Straw upright, from 6 to 18 inches, moſt commonly about a foot, in height, round, very ſmooth, with one or two joints near the bottom. Leaves moſtly at the root, with one from each joint of the ſtem as uſual in graſſes, the ſheaths of which laſt are very long, the ſtipules very ſhort, blunt, and entire. Branches of the panicle purpliſh, ſpreading, the lowermoſt in pairs, the others alternate, all ſo extremely ſlender, and more or leſs zigzag, that the ſpikes, which hang drooping from their extremities, tremble at the leaſt breath of air or other cauſe of agitation; from which circumſtance, as well as their elegant form and ſhining brown colour, they excite the admiration of the moſt incurious. The calyx is generally of a darker colour than the floral valves, but like them in ſhape; the florets are about 7, in two ranks, ſo that the ſpike is much compreſſed, and of a broad ovate figure.

BRIZA media.

Common Quaking Grass, or Cow-Quake.

Gen. Char. Cal. of 2 valves, with many flowers; the little bike two-ruked, its valves heart-shaped, obtuse, the innermost smaller.

Spec. Char. Little spikes ovate. Calyx shorter than the florets, which are about 7 in number.

Syn. Briza media. Linn. Sp. Pl. 102. Huds. Fl. Ab. 38. With. Bot. Arr. 92. Relh. Cant. 38. Sibth. Ox. 43. Mart. Ed. Rust. 1. 39. Dick. H. Sicc. fasc. 5. n.

Cranion tremulum. Ras. Syn. 424.

VERY common in pastures, where, as Professor Martyn observes, it is made into hay with other grasses, but never cultivated alone for any particular purpose. The roots are perennial, and the flowers appear in May.

Root fibrous. Straw upright, from 6 to 18 inches, most commonly about a foot, in bough, round, very smooth, with one or two joints near the bottom. Leaves mostly at the root, with one from each joint of the stem as usual in grasses, the sheaths of which last are very long, the stipules very short, blunt, and entire. Branches of the panicle purplish, spreading, the lowermost in pairs, the others alternate, all so extremely slender, and more or less zigzag, that the spikes, which hang drooping from their compunctes, tremble at the least breath of air or other cause of agitation; from which circumstance, as well as the elegant form and shining brown colour, they excite the admiration of the most incurious. The calyx is generally of a darker colour than the floral valves, but like them in shape; the florets are about 7, in two ranks, so that the spike is much compressed, and of a broad ovate figure.

G.R. III.
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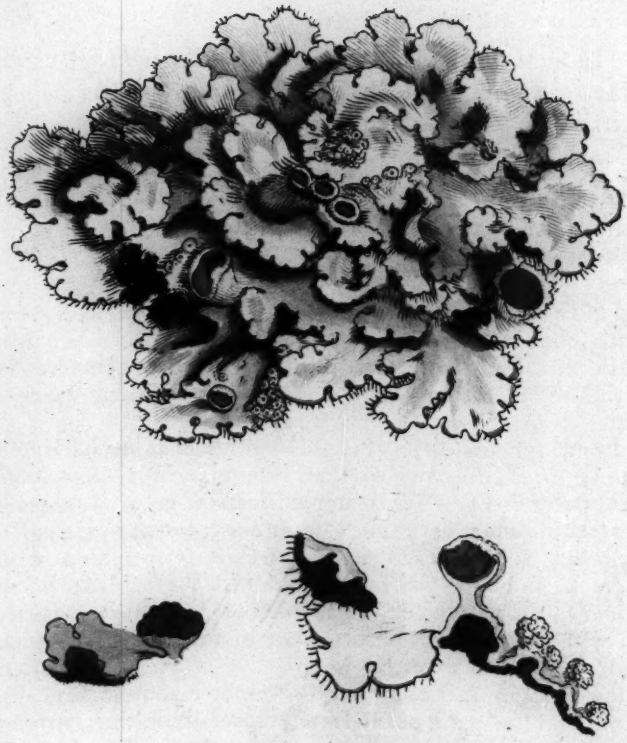


Drawn 1795 Published by J. Sowerby London

LICHEN perlatus.

Pearly Lichen.

CRYPTOGAMIA Algæ.

GEN. CHAR. Male, ſcattered warts.

Female, ſmooth ſhields or tubercles, in which the ſeeds are imbedded.

SPEC. CHAR. Leafy, creeping, lobed; grey and ſmooth above; black and hairy below; bordered with powdery tubercles. Shields on ſhort foot-ſtalks, olive-coloured, concave, with a crenate powdery inflexed margin.

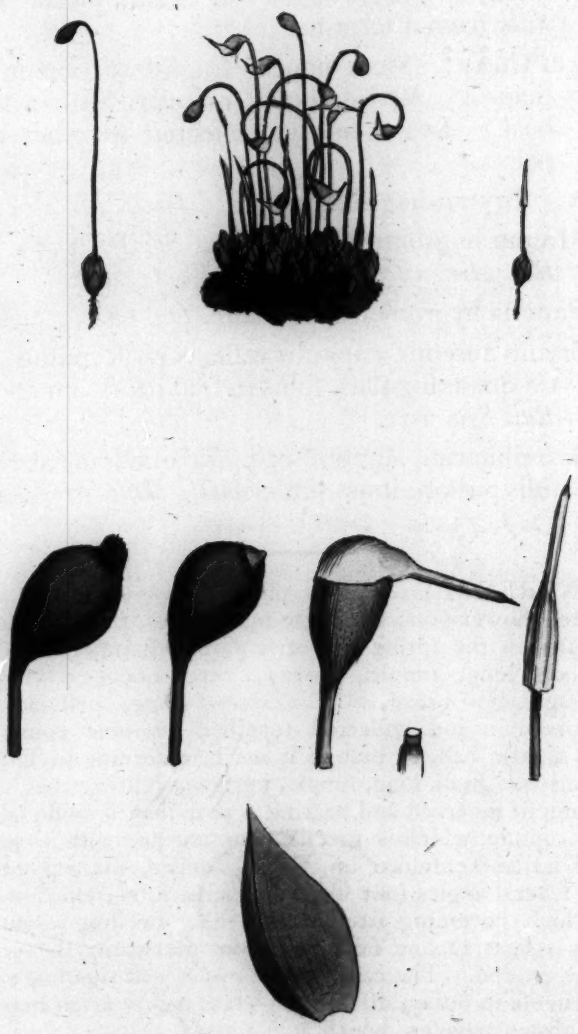
SYN. Lichen perlatus. *Linn. Syſt. Nat. ed.* 12. *v.* 2. 712. *Hudſ. Fl. An.* 543. *With. Bot. Arr. v.* 3. 205. *Relh. Cant.* 434. *Sibth. Ox.* 330. *Smith's Tour, v.* 1. 225. 260.

Lichenoides glaucum perlatum, ſubtus nigrum et cirroſum. *Dill. Muſc.* 147. *t.* 20. *f.* 39.

FOUND on the trunks of trees, old park pales, &c. very frequently, but it is one of the moſt rare of all Lichens in fructification. Our ſpecimen in that ſtate was gathered in Cardiganſhire laſt ſummer, and is the only Britiſh one we ever ſaw.

The fronds ſpread into patches about as broad as the hand, not very firmly attached in any part, and the margin is quite looſe and generally erect. Their upper ſurface is of a greyiſh white, greeniſh when very much moiſtened, ſmooth, though a little pitted; ſometimes indeed it becomes ſprinkled with mealy cracks and tubercles intermixed with ſhort black hairs. The under ſide is very black, partly ſmooth and ſhining, partly clothed with ſhort black rigid branched or forked hairs, which ſometimes project beyond the margin like a fringe; at other times the margin is ſmooth, and cheſnut-coloured, beneath. The more elevated parts of the frond, eſpecially in the centre of each patch, are bordered with roundiſh grey mealy tubercles, compared by Dillenius to pearls, by which this ſpecies is eſſentially diſtinguiſhed from L. *ſaxatilis*, *glaucus*, and ſome others near it. Shields a little elevated, cup-ſhaped, concave; their diſk of a greeniſh olive when wet, browner when dry; their margin inflexed, grey, powdery, crenate and lobed. Dillenius errs in deſcribing the hairs of the under ſurface as not branched.

G.R. III.



Pub.d 1.1796 by Phillips & Co. St. James's London

BRYUM hygrometricum.

Yellow twiſting Bryum.

CRYPTOGAMIA Muſci.

GEN. CHAR. *Capſ.* with a lid. *Veil* ſmooth. *Flower-ſtalk* from a terminal tubercle.

SPEC. CHAR. Stem none. Capſule drooping, pear-ſhaped. Veil oblique, angular, with a ſlender beak. Leaves ovate, collected together at their points.

SYN. Bryum hygrometricum. *Hudſ. Fl. An.* 488.

Mnium hygrometricum. *Linn. Sp. Pl.* 1575. *With. Bot. Arr. v.* 3. 86. *Relh. Cant.* 399.

Funaria hygrometrica. *Sibth. Ox.* 288.

Bryum aureum, capitulis reflexis piriformibus, calyptra quadrangulari, foliis in bulbi formam congeſtis. *Raii Syn.* 101.

B. bulbiforme aureum, calyptra quadrangulari, capſulis piriformibus nutantibus. *Dill. Muſc.* 407. *t.* 52. *f.* 75.

EXTREMELY common on moiſt garden walks and neglected flower-pots, waſte ground, heaths, &c. producing its capſules in the ſpring and early part of ſummer abundantly.

Roots long, ſimple, downy. Stem none, or very ſhort, bearing a few broad, ovate, entire, acute, pellucid leaves, ſo curved in and collected together by their points as to form a little ball, or bulb as it were, according to Dillenius's definition. Stalk long, ſimple, upright, yellow, then purple, its ſummit incurved and bearing a pear-ſhaped obliquely pendent capſule, which is green when unripe, with a yellowiſh blunt lid, and enfolded in a long, ſlender, ſharp-pointed veil with ſeveral angles (not always exactly four), the lower part of which becoming ſtretched by the ſwelling capſule, the point is bent to one ſide, and ſoon afterwards the veil falls to the ground. The capſule turns yellow in ripening; brown and rugoſe in decay, diſcharging great plenty of an impalpable pale-brown powder, which is the ſeed.

Linnæus in his *Flora Suecica* rightly aſſerts, that if the lower half of the ſtalk be moiſtened, the capſule turns one way, and if the upper half (not as erroneouſly tranſlated in the *Bot. Arr.* the *head*, or capſule) receives the moiſture, it turns in a contrary direction.

G.R. III.
BRITISH MUSEUM

Sept.r 1798 Published by J.t Sowerby

CROCUS autumnalis.

Saffron, or Autumnal Crocus.

TRIANDRIA Monogynia.

GEN. CHAR. *Cor.* in 6 diviſions, regular. *Stigmas* convoluted.

SPEC. CHAR. Sheath of one leaf, radical. Tube of the corolla very long. Stigma in three deep linear diviſions hanging out of the flower.

SYN. Crocus ſativus α. *Linn. Sp. Pl.* 50. *Hudſ. Fl. An.* 13. *With. Bot. Arr.* 37. *Relh. Cant.* 15. *Woodv. Med. Bot. t.* 176.

C. officinalis. *Mart. Fl. Ruſt. t.* 58.

Crocus. *Raii Syn.* 374. *Ger. em.* 151.

SAFFRON has very little right, as Profeſſor Martyn obſerves, to a place in the Britiſh Flora, having been introduced from the ſouth of Europe for culture as a medicinal plant. We ſhould ſcarcely indeed have followed the example of our predeceſſors in retaining it, were it not for the authority of the Rev. Mr. Wood, who found it about Halifax, and of Mr. Whately, who obſerved it near Derby, according to Dr. Withering. Our ſpecimen came from Saffron Walden, the only place in which this article of the materia medica is now produced for ſale in England. See a full account of it in the Flora Ruſtica and Medical Botany.

Root a depreſſed bulb. Leaves all radical, inveſted with membranous ſheaths, from which they emerge but little before the flowers fade; they are linear, dark green above, with a white longitudinal furrow; pale beneath, with a very prominent but flattened mid rib; their margins ſlightly revolute. Flowers ſeſſile at the root, though with ſo long a cylindrical tube as to ſeem pedunculated; the limb in 6 elliptical, concave, rich-purple, regular ſegments. Stamina ſhorter than the corolla, erect. Style about equal to the corolla, but hanging out on one ſide between 2 of its ſegments, being deeply cloven into three deep-orange linear ſtigmas (which are the Saffron itſelf), their edges rolled in, their ſummits notched.—It flowers in Auguſt or September. A kind of tap-root frequently grows from the bulb, which is conſidered by the cultivators as a diſeaſe.

G R III
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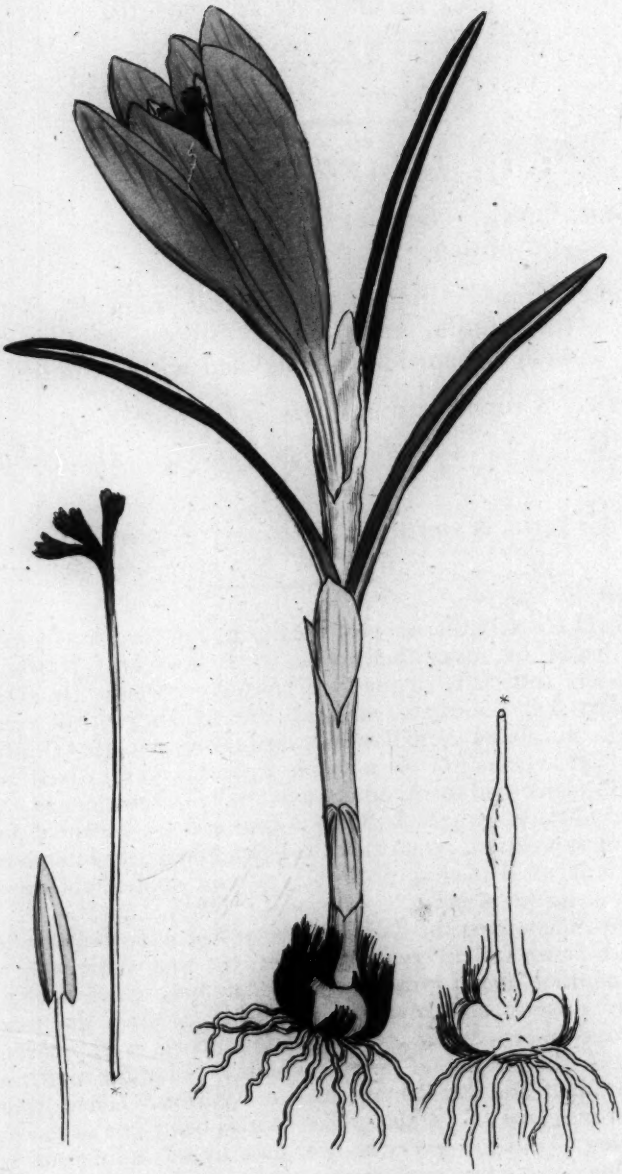

Jan.ʸ 1.1796 Published by J.ᵗ Sowerby London.

CROCUS vernus.

Spring Crocus.

TRIANDRIA Monogynia.

GEN. CHAR. *Cor.* in 6 diviſions, regular. *Stigmas* convoluted.

SPEC. CHAR. Sheath of one leaf, radical. Tube of the corolla very long. Stigma in three ſhort wedge-ſhaped lobes, encloſed within the flower.

SYN. Crocus vernus. *Mart. Fl. Ruſt. t.* 59.

C. ſativus β. *Linn. Sp. Pl.* 50. *Hudſ. Fl. An.* 13. *With. Bot. Arr.* 38.

C. vernalis cæruleus. *Deering Nottingh.* 60.

THIS wild ſpecimen of the Spring, or Garden, Crocus was gathered by Mrs. Sherbrooke of Arnold near Nottingham, March 15th laſt, in the ſame meadows where Dr. Deering obſerved it 60 or 70 years ago, and which are ſtill rendered quite purple by theſe flowers every ſpring; ſo that this ſpecies at leaſt appears to have a better right to be reckoned an Engliſh plant than many others univerſally acknowledged, as the Rev. Mr. Wood, F. L. S. to whom we are indebted for the communication, remarks. Profeſſor Martyn mentions having ſeen it at Batterſea, near the mill, in conſiderable quantity, above 40 years ago.

It differs from the Saffron Crocus in having broader leaves, with flatter or leſs revolute edges; yet that difference is not ſo conſtant as the great one of the ſtigmas, which in the plant before us are comparatively very little divided, the ſegments wedge-ſhaped, much and unequally notched, erect (not hanging out of the flower), of a paler colour, and quite deſtitute of the ſmell and cordial qualities of Saffron.—Their times of flowering are alſo widely different, this being one of the earlieſt ſpring plants, as every body knows by the numerous purple, yellow, and white varieties growing in every garden; the other is quite an autumnal flower, and theſe differences are permanent under every mode of culture hitherto tried.

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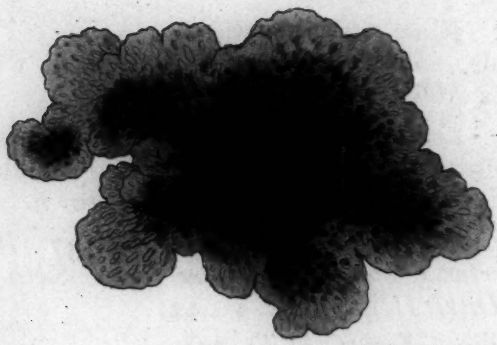


Sowerby & Co. Published by J. Sowerby

LICHEN nigreſcens.

Blackiſh, or Bat's-wing Lichen.

CRYPTOGAMIA Algæ.

GEN. CHAR. Male, ſcattered warts.
Female, ſmooth ſhields or tubercles, in which the ſeeds are imbedded.

SPEC. CHAR. Leafy, gelatinous, membranous, rugged and bliſtered, of a dark dull green, the lobes rounded. Shields cluſtered, reddiſh brown.

SYN. Lichen nigreſcens. *Hudſ. Fl. An.* 537. *With. Bot. Arr. v.* 3. 198. *Relh. Cant.* 430. *Sibth. Ox.* 328. *Dickſ. H. Sicc. faſc.* 11. 22.

L. veſpertilio. *Lightf. Fl. Sc.* 840.

Lichenoides ſaxatile membranaceum gelatinoſum tenue nigreſcens. *Raii Syn.* 72.

L. gelatinoſum membranaceum, tenue, nigricans. *Dill. Muſc.* 138. *t.* 19. *f.* 20.

NOT unfrequent on the trunks of trees in damp woods, or on moiſt rocks, &c. It grows in patches lying cloſe to the bark, eſpecially the outermoſt lobes of the frond, which are rounded and entire, appearing very much wrinkled from numerous oblong parallel puſtule-like elevations in the ſubſtance of the frond, each of which is hollowed out on the under ſide. The whole plant is ſmooth, membranous, tender and gelatinous, of a dull deep green when wet, blackiſh when dry, and not unaptly compared by Dillenius to a bat's wing. Cluſters of little granules ariſe about the centre of the plant, and ſometimes all over it, which are probably *gemmæ*, analogous to the bulbs of *Dentaria bulbifera*, *Lilium bulbiferum*, &c. and this appears to be the moſt common mode of propagation in this Lichen as well as ſome others. The ſhields are rarely found. When preſent, they are cluſtered about the middle of the plant, ſmall, of a reddiſh brown, each elevated on a little protruſion of the frond, and with a ſlight entire green margin originating from it. When old they become convex.

LICHEN nigrescens.

Blackish, or Dull-red Lichen.

CRYPTOGAMIA Algæ.

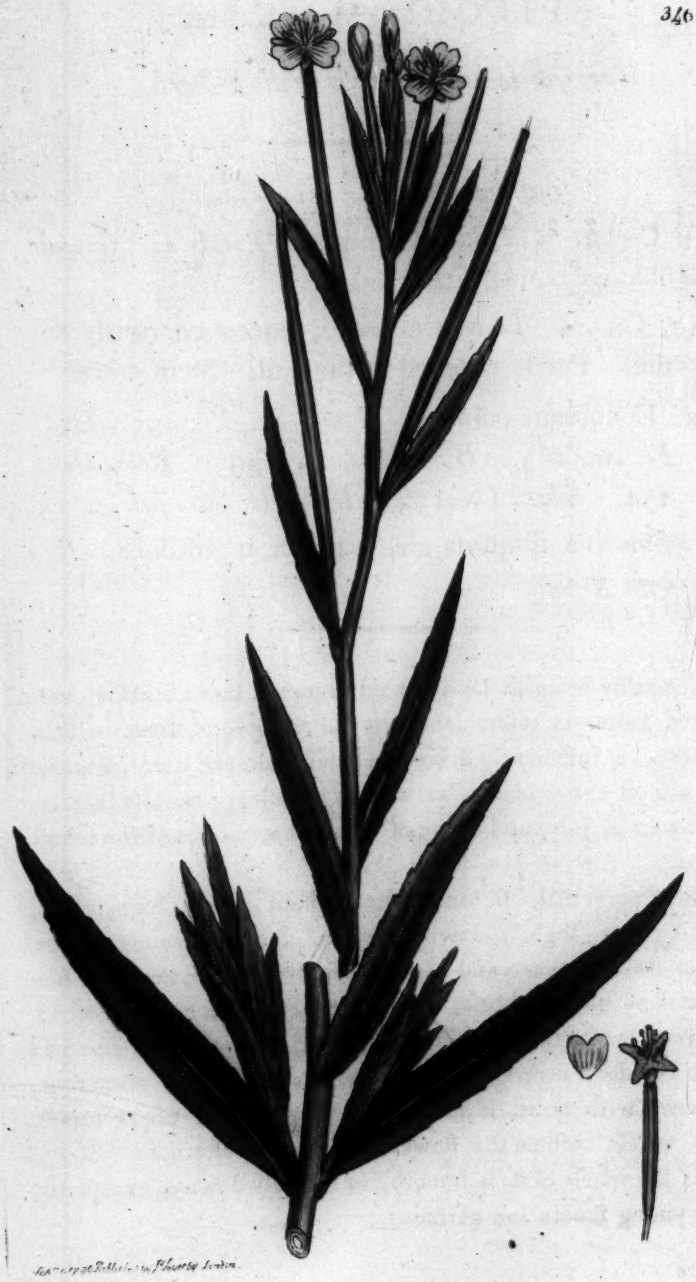
Gen. Char. Male, scattered warts.
Female, smooth thickish or tubercles, in which the seeds are imbedded.

Spec. Char. Leafy, gelatinous, membranous, irregularly and blistered, of a dark dull green, the lobes rounded. Shields clustered, reddish brown.

Syst. Lichen nigrescens. Huds. Fl. Ang. 597. Willd. Sp. Pl. v. 3. 1348. Relh. Cant. 439. Sibth. Ox. 328. Dicks. H. Sicc. fasc. 11. 22.
L. velpertilio. Lightf. Fl. Sc. 840.
Lichenoides foliis maximis membranaceum gelatinosum tenue nigrescens. Raii Syn. 72.
L. gelatinosum membranaceum, tenue, nigricans. Dill. Musc. 198. t. 19. f. 20.

NOT unfrequent on the trunks of trees in damp woods, or on moist rocks, &c. It grows in patches lying close to the bark, especially the outermost lobes of the frond, which are rounded and entire, appearing very much wrinkled from numerous oblong parallel pustule-like elevations in the substance of the frond, each of which is hollowed out on the under side. The whole plant is smooth, membranous, tender and gelatinous, of a dull deep green when wet, blackish when dry, and not unaptly compared by Dillenius to a bat's wing. Clusters of little granules arise about the centre of the plant, and sometimes all over it, which are probably seeds, analogous to the bulbs of Dentaria bulbifera, Lilium bulbiferum, &c. and this appears to be the most common mode of propagation in this Lichen as well as some others. The thicks are rarely found. When present, they are clustered about the middle of the plant, small, of a reddish brown, each elevated on a little protuberance of the frond, and with a slight entire green margin originating from it. When old they become convex.

G.R. III
BRITISH MUSEUM



Sowerby del. et lith. Published by J. Sowerby, London.

EPILOBIUM paluſtre.

Narrow-leaved Marſh Willow-herb.

OCTANDRIA Monogynia.

GEN. CHAR. *Cal.* in 4 ſegments. *Petals* 4. *Capſule* oblong. *Seeds* feathered.

SPEC. CHAR. Leaves oppoſite, lanceolate, nearly entire. Petals notched at the end. Stem erect.

SYN. Epilobium paluſtre. *Linn. Sp. Pl.* 495. *Hudſ. Fl. An.* 163. *With. Bot. Arr.* 391. *Relh. Cant.* 154. *Sibth. Ox.* 123. *Dickſ. H. Sicc. faſc.* 2. 15.

Lyſimachia ſiliquoſa glabra minor anguſtifolia. *Raii Syn.* 311.

IN marſhy mooriſh land not unfrequent, though eaſily overlooked from its reſemblance to E. *tetragonum*, from which, however, it ſufficiently differs in having a round ſtem, narrow and almoſt entire leaves, as well as in being generally ſmaller. It flowers in July, and is one of the leaſt attractive of the whole genus.

Root perennial, fibrous. Stem about a foot high, erect, round, leafy, ſlightly downy, as are alſo the young leaves, flower-ſtalks, germen and calyx. Leaves oppoſite, nearly ſeſſile, linear-lanceolate, obtuſe, entire or very obſoletely toothed. Flowers erect, ſmall, of a pale purple, the petals ſo notched as to be often inverſely heart-ſhaped. Seeds very numerous, crowned with at uft of long ſlender hair. The upper leaves, from whoſe boſoms the flowers ſpring, are alternate. Sometimes the whole herb is ſmooth, or ſcarcely downy, except the very young ſhoots and germens.

EPILOBIUM palustre.

Narrow-leaved Marsh Willow-herb.

OCTANDRIA Monogynia.

Gen. Char. Calyx 4-cleft. Petals 4. Capsule oblong. Seeds feathered.

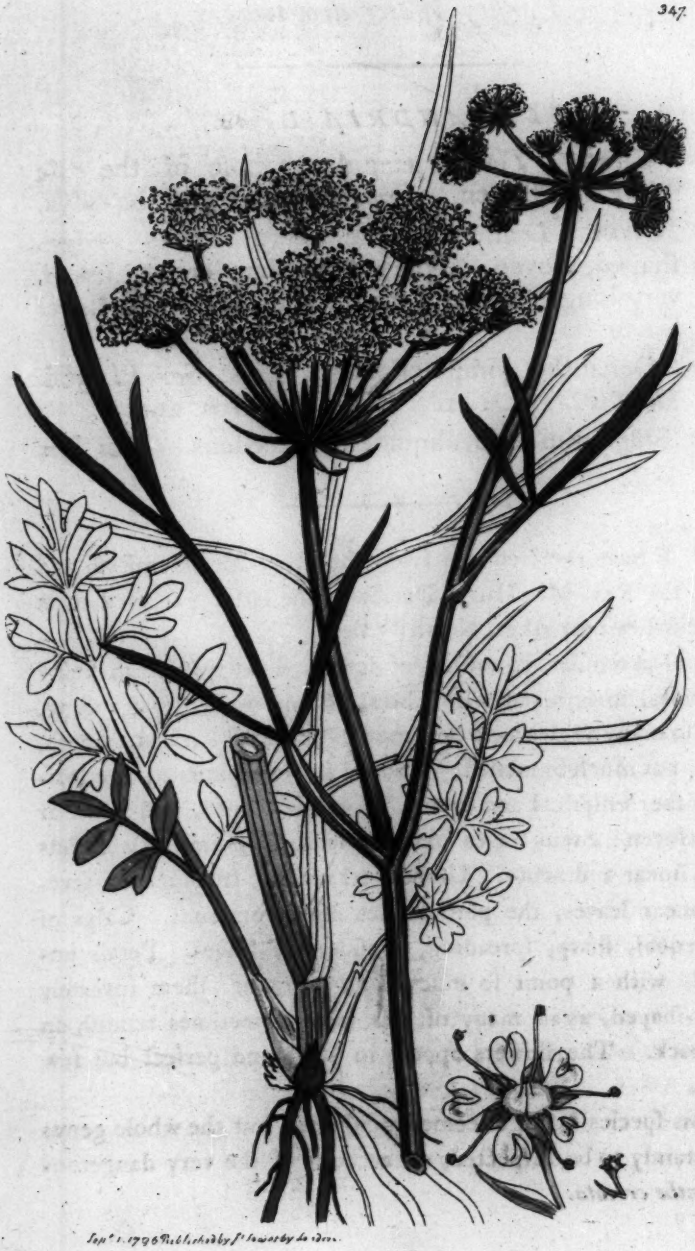
Spec. Char. Leaves opposite, lanceolate, nearly entire. Petals notched at the end. Stem erect.

Syn. Epilobium palustre. Linn. Sp. Pl. 495. Huds. Fl. Ang. 163. With. Bot. Arr. 391. Relh. Cant. 154. Sibth. Ox. 123. Dill. Elth. Suec. Icon. t. 15. Lythrum tiliquosa glabra minor angustifolia. Raii Syn. 311.

IN marshy moorish land not unfrequent, though easily overlooked from its resemblance to E. hirsutum, from which however, it sufficiently differs in having a round stem, narrow and almost entire leaves, as well as in being generally smaller. It flowers in July, and is one of the least attractive of the whole genus.

Root perennial, fibrous. Stem about a foot high, erect, round, leafy, slightly downy, as are also the young leaves, flower-stalks, germen and calyx. Leaves opposite, nearly sessile, linear-lanceolate, obtuse, entire or very obsolescently toothed. Flowers erect, small, of a pale purple, the petals is notched as to be often inversely heart-shaped. Seeds very numerous, crowned with a tuft of long slender hair. The upper leaves, from which bolons the flowers spring, are alternate. Sometimes the whole herb is smooth, or scarcely downy, except the very young shoots and germens.

G.R
III.
BRITISH MUSEUM



Sept.r 1.1796 Published by J.t Sowerby London.

OENANTHE pimpinelloides.

Parſley Water-dropwort.

PENTANDRIA Digynia.

GEN. CHAR. *Florets* irregular: thoſe of the diſk ſeſſile and barren. *Fruit* crowned with the calyx.

SPEC. CHAR. Leaflets of the radical leaves wedge-ſhaped, cloven; thoſe on the ſtem entire, linear, very long. General involucrum of ſeveral linear leaves.

SYN. Oenanthe pimpinelloides. *Linn. Sp. Pl.* 366. *Hudſ. Fl. An.* 121. *With. Bot. Arr.* 297.

O. Staphylini folio aliquatenus accedens. *Raii Syn.* 219.

WE have received this from the Rev. Mr. Hemſted, and from the Rev. Mr. Hugh Davies. The latter gathered it in ſalt marſhes near Aber, North Wales.

Root perennial, conſiſting of ſeveral ſlender fuſiform fleſhy tubercles, intermixed with fibres. Stem erect, or aſcending, with ſo many angles as to be almoſt cylindrical, ſtriated, ſmooth, leafy, not much branched. Radical leaves bipinnate; the leaflets either elliptical and entire, or wedge-ſhaped, and more or leſs cloven: Stem-leaves pinnate, ſcarcely bipinnate; leaflets long, linear and acute. Umbels terminal. Involucra of ſeveral linear leaves, the partial ones moſt numerous. Calyx of 5 unequal, ſharp, ſpreading, conſiderable leaves. Petals unequal, with a point ſo inflexed as to render them inverſely heart-ſhaped, as in many of this tribe, ſometimes reddiſh on the back. The flowers appear in July, and perfect but few ſeeds.

This ſpecies is not eſteemed poiſonous, but the whole genus is certainly to be ſuſpected, on account of the very dangerous *Oenanthe crocata.*

G.R. III.
BRITISH MUSEUM

Pubd. 1795 by Sowerby & Co.

OENANTHE peucedanifolia.

Sulphur-wort Water-dropwort.

PENTANDRIA Digynia.

GEN. CHAR. *Florets* irregular: thoſe of the diſk ſeſſile and barren. *Fruit* crowned with the calyx.

SPEC. CHAR. Leaflets all linear. General involucrum none. Knobs of the root ſeſſile, elliptical.

SYN. Oenanthe peucedanifolia. *Pollich Plant. Palat. vol.* 1. 289. *t.* 3. *Sibth. Ox.* 98.

SENT by W. Mathew, Eſq. from near Bury, and by the Rev. Mr. Abbot from the neighbourhood of Bedford. Profeſſor Sibthorp alſo found it in ſeveral places about Oxford, as mentioned in his Flora. No other Britiſh author has noticed this ſpecies, probably having confounded it with O. *pimpinelloides*, which is rather a maritime plant, while *peucedanifolia* grows in freſh inland waters.

The root of this conſiſts of thick oval or elliptical knobs, which taſte ſomething like parſnep, but are probably dangerous food. Stem thicker than in the preceding, as well as taller and more erect. Radical leaves bipinnate; ſtem-leaves ſcarcely more than pinnate; leaflets all linear and acute, by which it is at once diſtinguiſhed from the preceding, as well as by the want of a general involucrum, of which there are ſcarcely ever any ſigns. The rays of the general umbel are alſo fewer and much thicker than in O. *pimpinelloides*, and the calyx is more erect. The flowers appear in June, and are often reddiſh, the marginal ones frequently female only, being impregnated by thoſe of the centre.

OENANTHE peucedanifolia.

Sulphur-wort Water-dropwort.

PENTANDRIA Digynia.

Gen. Char. Floret irregular: those of the disk fertile and barren. Fruit crowned with the calyx.

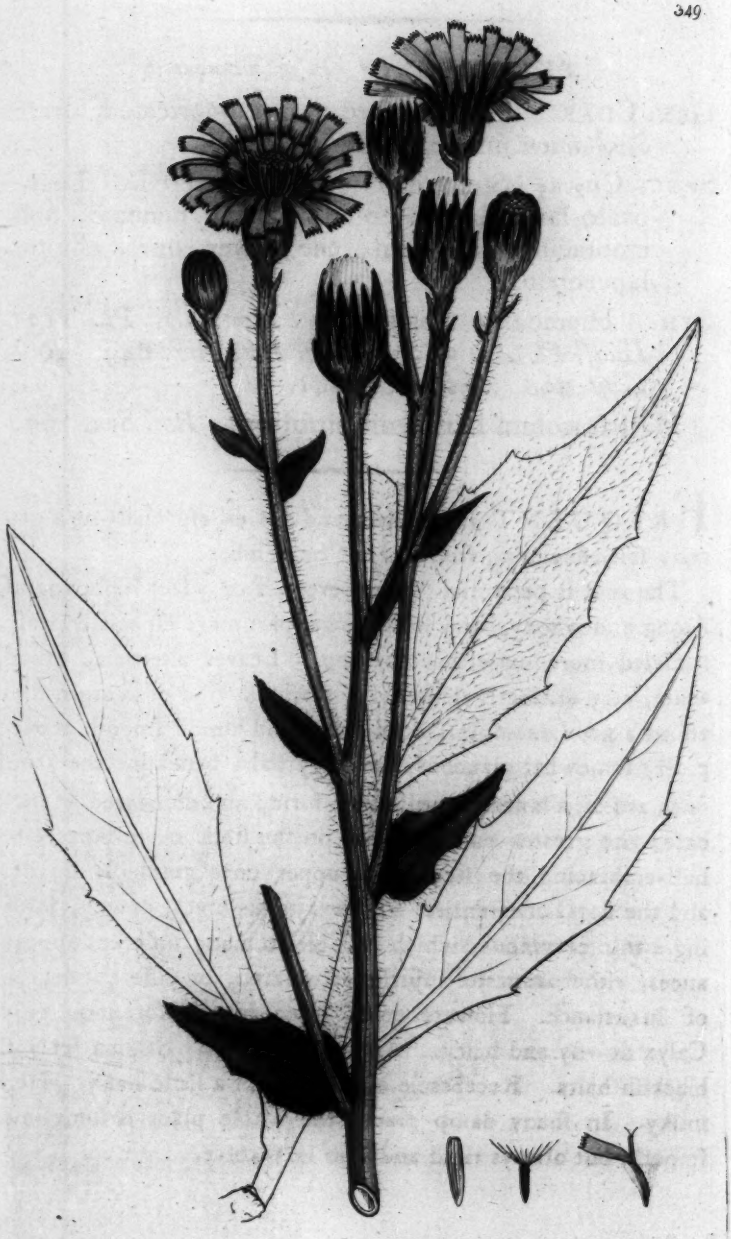
Spec. Char. Leaflets all linear. General involucrum none. Knobs of the root fertile, elliptical.

Syn. Oenanthe peucedanifolia. Pallas Plant. Pedat. vol. 1. 489. n. 3. Web. Obs. 89.

SENT by W. Mathew, Esq. from near Bury, and by the Rev. Mr. Abbot from the neighbourhood of Bedford. Profeſſor Sibthorp alſo found it in ſeveral places about Oxford, as mentioned in his Flora. No other Britiſh author has noticed this ſpecies, probably having confounded it with O. pimpinelloides, which is rather a maritime plant, while peucedanifolia grows in freſh inland waters.

The root of this ſpecies is thick oval or elliptical knobs, which take long-ſtring like parting, but are probably dangerous to eat. Stem thicker than in the preceding, as well as taller and more erect. Radical leaves bipinnate; ſtem-leaves lanceolately more than pinnate; leaflets all linear and acute, by which it is at once diſtinguiſhed from the preceding, as well as by the want of a general involucrum, of which there are ſcarcely ever any ſigns. The rays of the general umbel are alſo fewer and much thicker than in O. pimpinelloides, and the calyx is more erect. The flowers appear in June, and are often reddiſh, the marginal ones frequently female only, being impregnated by thoſe of the centre.

G.R. III.



1798 Published by J.F. Sowerby London

HIERACIUM ſabaudum.

Shrubby Hawkweed.

SYNGENESIA Polygamia-æqualis.

GEN. CHAR. *Recept.* naked. *Cal.* imbricated, ovate. *Seed-down* ſimple, ſeſſile.

SPEC. CHAR. Stem erect, many-flowered. Leaves ovato-lanceolate, dentated, hairy beneath, half-embracing the ſtem; the lower ones elliptic-lanceolate.

SYN. Hieracium ſabaudum. *Linn. Sp. Pl.* 1131. *Hudſ. Fl. An.* 345. *With. Bot. Arr.* 849. *Relh. Cant.* 298. *Sibth. Ox.* 241.

H. fruticoſum latifolium hirſutum. *Raii Syn.* 167.

FREQUENT in coppices and groves, eſpecially on a gravelly ſoil, flowering from July to September.

The root is perennial. Stem erect, 2 or 3 feet high, round, ſtrong and woody, hairy in the lower part more eſpecially, leafy, panicled more or leſs at the top. Leaves alternate, broad, acute, very diſtinctly dentated (of which kind of margin they afford a good example); dark-green and almoſt ſmooth above; paler, ſomewhat glaucous, and very hairy beneath: the lower ones are of a lanceolate-elliptical form, and elongated at their baſe; the greater part of thoſe on the ſtem ovato-lanceolate, half-embracing the ſtem; the upper ones gradually ſmaller, and the floral ones entire. Flower-ſtalks erect, downy, forming a thin corymbus, which is liable to many different appearances, either from the injuries of animals, or different degrees of luxuriance. Flowers erect, open in the forenoon only. Calyx downy and hairy. Antheræ greeniſh. Stigma ſet with blackiſh hairs. Receptacle cellular, often a little hairy. Herb milky. In ſhady damp places the whole plant is ſometimes ſmooth, but always rigid and firm in texture.

G.R. III.

Oct.1. 1796. Published by J.P. Knowles, Dublin.

PYRUS domeſtica.

Service Tree.

ICOSANDRIA Pentagynia.

GEN. CHAR. *Cal.* 5-cleft. *Petals* 5. *Apple* inferior, with 5 cells and ſeveral ſeeds.

SPEC. CHAR. Leaves pinnate: leaflets equal, downy beneath, ſerrated towards the point. Flowers in panicles.

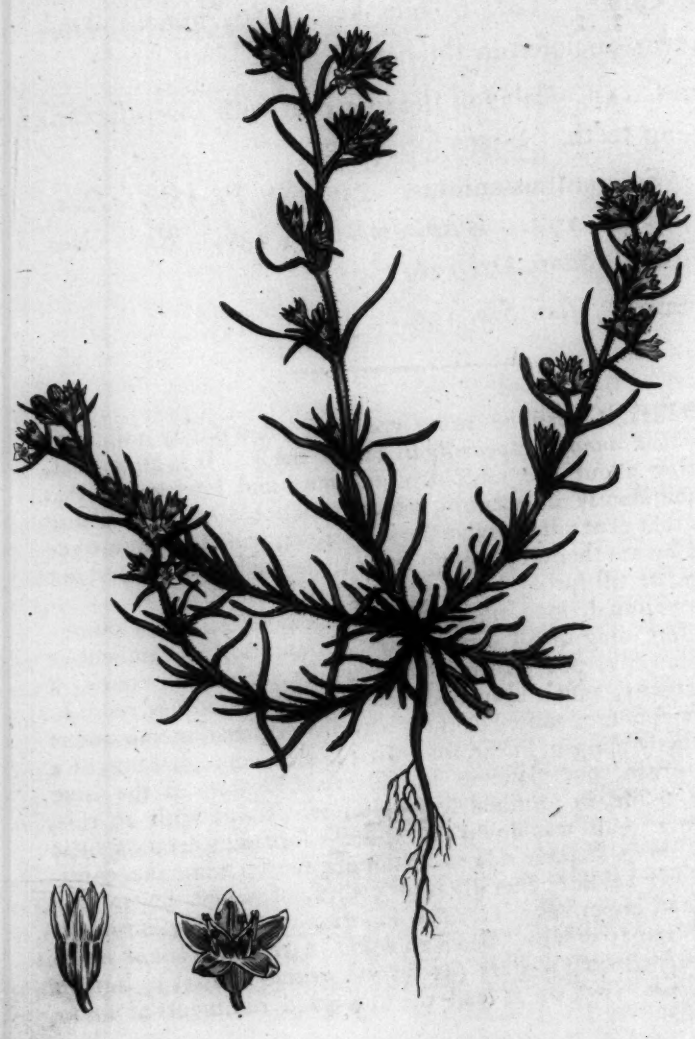
SYN. Sorbus domeſtica. *Linn. Sp. Pl.* 684. *Hudſ. Fl. An.* 215. *With. Bot. Arr.* 514. *Crantz. Stirp. faſc.* 2. 48. *tab.* 2. *f.* 3.
Sorbus. *Raii Syn.* 452.

WE have been favoured by Lord Viſcount Valentia with freſh wild ſpecimens of this rare Britiſh plant, gathered from a ſolitary tree in the middle of Wire foreſt, near Bewdley, Worceſterſhire, the ſame probably that was obſerved by Mr. Pitts in Ray's time. It is ſaid to grow alſo in the mountainous parts of Cornwall and Staffordſhire, and may now and then be met with in old gardens, having been formerly cultivated for the ſake of its fruit, which is like, but inferior to, a Medlar. It flowers in May.

The tree is of a middle ſize, not unlike the Mountain Aſh, of very ſlow growth, not flowering till it arrives at a great age, and the wood is very hard. Leaves alternate, compoſed of about 7 or 9 pair of oppoſite, ſeſſile, ovate or oblong leaflets, with an odd terminal one of the ſame ſize; all entire at the baſe, ſerrated from about half way to the end, ſmooth above, downy beneath, but that downineſs goes off towards autumn. Flowers in panicles, cream-coloured. Calyx very woolly. Petals concave, with hairy claws. Stamina numerous. Styles always 5, with oblique concave ſtigmas. Fruit pear-ſhaped, reddiſh and ſpotted, extremely auſtere, and not eatable till it is quite mellowed by froſt or time, when it becomes brown and very ſoft. Cells 5, with one ſeed in each.

Every botanical principle whatever obliges us to remove this tree from the genus of Sorbus, as Crantz alſo obſerves, who would have been more regarded in many caſes than he is, if he had written with more temper. From an accurate examination of the half-ripe fruit, we have found it a genuine Pyrus, having indeed only one ſeed in each bivalve capſule of the apple, but that is not peculiar to this ſpecies. The pinnated leaves are (as to *habit*) a much more important objection.

G.R. III.



Oct.1.st 1796 Published by J.t Sowerby

SCLERANTHUS annuus.

Annual Knawel.

DECANDRIA Digynia.

GEN. CHAR. *Cal.* of one leaf. *Cor.* none. *Seeds* two, encloſed in the calyx.

SPEC. CHAR. Calyx of the ripe fruit with ſharp ſpreading teeth. Stems ſpreading.

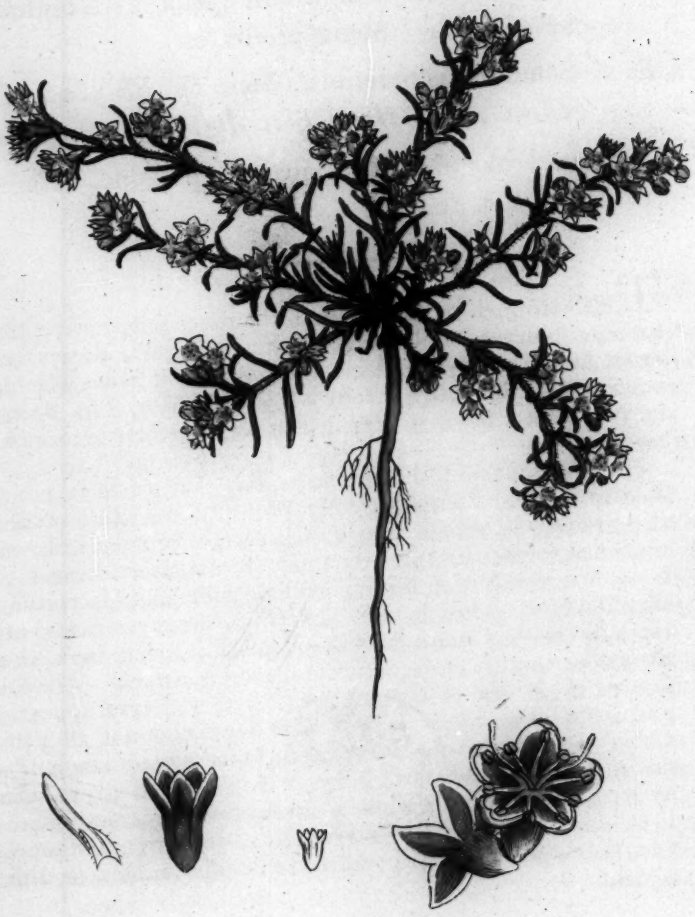
SYN. Scleranthus annuus. *Linn. Sp. Pl.* 580. *Hudſ. Fl. An.* 178. *With. Bot. Arr.* 436. *Relh. Cant.* 165. *Sibth. Ox.* 138.

Knawel. *Raü Syn.* 159.

NOTHING can be more common on a ſandy ſoil than *Scleranthus annuus*, eſpecially in fallow fields. It is an annual, flowering about the middle of ſummer, and ſowing its ſeeds very abundantly in autumn, which produce a crop of young plants that generally ſurvive the winter, or, if deſtroyed, are replaced by another crop ariſing from thoſe ſeeds that happen not to vegetate till ſpring.

Root annual, long, not much branched. Stems very numerous, ſpreading in all directions, the outermoſt decumbent at the baſe only, not proſtrate their whole length, all round, a little downy, much branched, leafy, pale, ſometimes reddiſh. Leaves oppoſite, united at their baſe by a dilated, membranous and downy margin, linear, ſomewhat keeled, acute, ſmooth, of a graſſy green, not glaucous nor ſilvery. Flowers of the ſame colour, ſeſſile, in terminal leafy cluſters. Calyx with 10 ribs, and cloven half way down into 5 ſharp ſpreading teeth, a little membranous at their edges. Stamina ſhorter than the calyx, ſometimes 10, but generally from 5 to 8, of which ſeveral are ſhort and imperfect. Germen ſuperior, ovate. Styles ſpreading. Stigmas downy. Seed encloſed in the permanent hardened calyx, often ſolitary (as ſeveral writers remark); but we have found two, or at leaſt the unripened rudiments of two.

G.R. III



Oct. 1st 1794 Published by T. Jones, London.

SCLERANTHUS perennis.

Perennial Knawel.

DECANDRIA Digynia.

GEN. CHAR. *Cal.* of one leaf. *Cor.* none. *Seeds* two, encloſed in the calyx.

SPEC. CHAR. Calyx of the ripe fruit with obtuſe incurved teeth. Stems proſtrate.

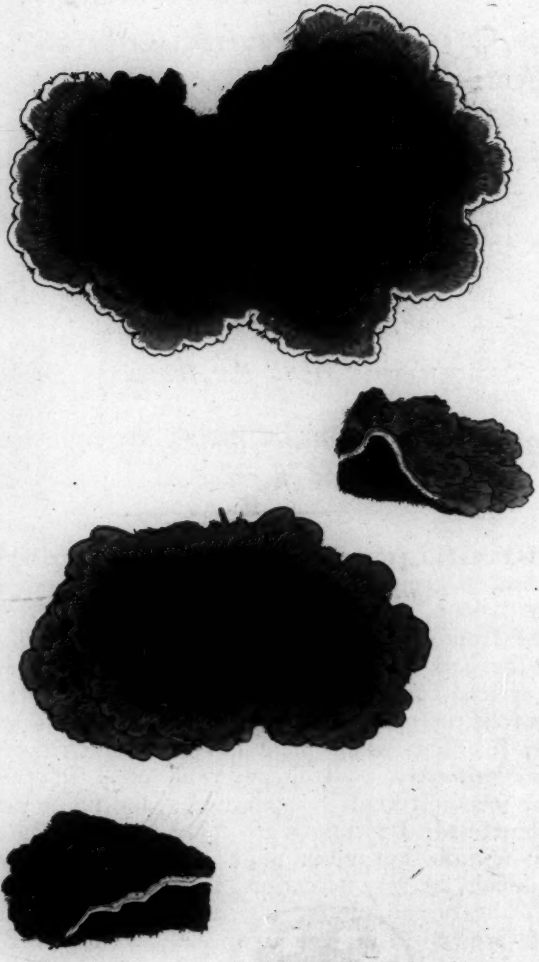
SYN. Scleranthus perennis. *Linn. Sp. Pl.* 580. *Hudſ. Fl. An.* 178. *With. Bot. Arr.* 437.

Knawel incanum flore majore, perenne. *Raii Syn.* 160. *t.* 5. *f.* 1.

THIS is much more rare than the preceding, having hitherto been obſerved only in Norfolk and Suffolk, always on the drieſt barren ſandy heaths. We received it from the neighbourhood of Bury, by favour of W. Mathew, Eſq. flowering in November, for it is later in that reſpect than authors mention.

The root is ſaid to be perennial, but that we have not been able to verify. Stems perfectly proſtrate and cloſe preſſed to the ground, downy in the upper part, often purpliſh, much branched, eſpecially towards their extremities. Leaves glaucous, "covered with ſhining pellucid tubercles," according to Mr. Mathew's remark, and ſometimes downy. Segments of the calyx with a more membranous border than in S. *annuus*, their points much more obtuſe and curved inward. The earlier flowers in the end of ſummer are of a very ſilvery appearance, and attract the eye at a diſtance. Filaments not all perfect. Calyx in the flowering ſtate cloven rather more than half way down, but not ſo when the germen ſwells, externally pubeſcent. When growing old the whole plant becomes of a reddiſh brown. Dillenius's figure in Ray's Synopſis is too large and upright, and ſhews nothing that could ſerve to diſcriminate ſo difficult a plant.

G.R. III.
DIEU ET MON DROIT



Oct.r 1798 Published by J.t Sowerby London

LICHEN plumbeus.

Lead-coloured ſpongy Lichen.

CRYPTOGAMIA Algæ.

GEN. CHAR. Male, ſcattered warts.

Female, ſmooth ſhields or tubercles, in which the ſeeds are imbedded.

SPEC. CHAR. Imbricated. Segments lobed, obtuſe, greyiſh; clothed underneath with very thick, blueiſh, ſpongy down. Shields ſmall, flat, ruſty-coloured; their margins entire.

SYN. Lichen plumbeus. *Lightf. Scot.* 826. *t.* 26. *f.* 2. *With. Bot. Arr. v.* 3. 187.

L. cæruleſcens. *Hudſ. Fl. An.* 531. *Dickſ. H. Sicc. faſc.* 10. 24.

Lichenoides tenue et molle, Agarici facie. *Dill. Muſc.* 179. *t.* 24. *f.* 73.

BROUGHT from Cardiganſhire laſt ſummer by Dr. Smith. It grows on trunks of trees, in the mountainous counties of Great Britain, not unfrequently.

The fronds are remarkably thick and cork-like, elevated from the bark on which they grow by a denſe ſpongy coat of blue or lead-coloured down, that is often prominent and viſible beyond the margin of the leaf, which ſeems to be forced up by it. The whole plant has very much the texture of *Boletus verſicolor*, as Dillenius well obſerved; though, not having ſeen it recent, his deſcription and figure are far from excellent. Mr. Lightfoot's are much better. The upper ſurface is ſmooth, but not ſhining, often longitudinally wrinkled. The ſhields are very numerous, ſcattered over the diſk of the frond, and often cluſtered and confluent, of a ſmall ſize, flat, reddiſh-brown or ruſty-coloured, with an entire margin nearly of the ſame colour. Specimens which bear no ſhields are frequently nearly covered with grey granulations or warts, which have been preſumed to be the male flowers, and are what Hedwig takes for ſuch. We are inclined to ſuſpect them to be rather analogous to *gemmæ*, or the bulbs of *Lilium bulbiferum*, *Dentaria bulbifera*, &c. and that (as in thoſe) the plant which bears them has a leſs tendency to bear flowers or ſeeds; though theſe warts do alſo occur on the ſhield-bearing fronds. We have never however traced them to young plants.

LICHEN plumbeus.

Lead-coloured Penny Lichen.

CRYPTOGAMIA.

Gen. Char. Male scattered warts.

Female, smooth shields or tubercles, in which the seeds are imbedded.

Spec. Char. Imbricated, Squamose lobed, obtuse, greyish; clothed underneath with very thick bluish, fibrous down; shields small, flat, fruity-coloured, their margin entire.

Syn. Lichen plumbeus. Lightf. Scot. 826. t. 26. f. 2. Web. obs. fasc. 2. p. 187.

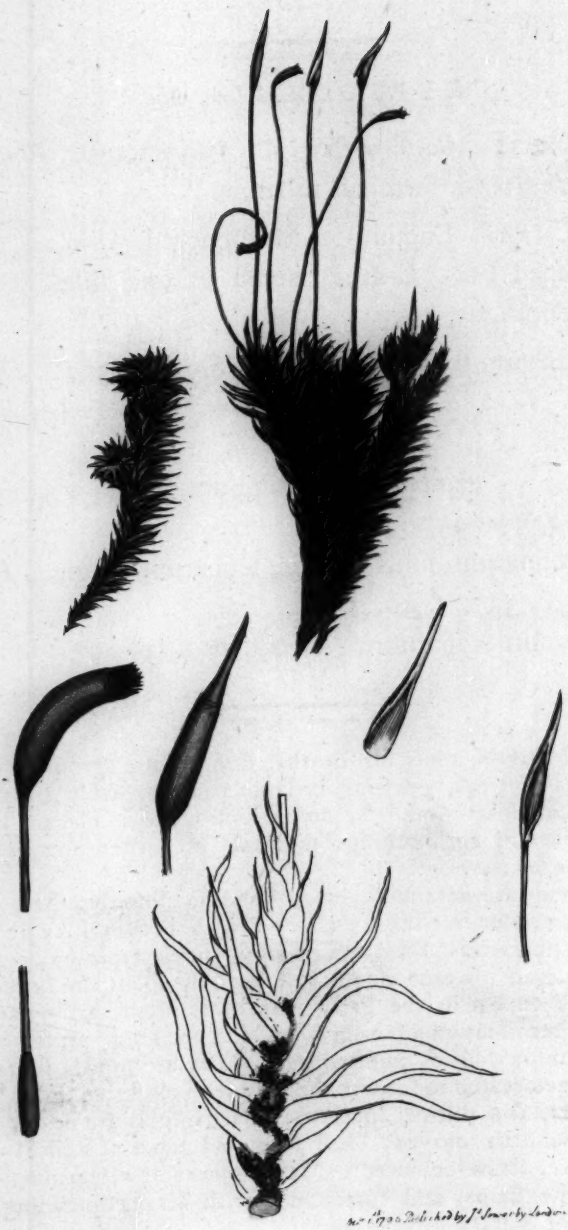
L. caerulescens. Flavk. Fl. Lond. 232. Dick. H. Sicc. fo. 10. 22.

Lichenoides tenue et molle, Aganici facie. Dill. Musc. 179. t. 24. f. 23.

BROUGHT from Cardiganshire and Anglesea by Dr. Smith. It grows on trunks of trees, in the less moist counties of Great Britain, not unfrequently.

The fronds are remarkably thin and pelt-like, elevated from the bark on which they grow by a large downy coat of blue or lead-coloured down, that is very prominent and visible beyond the margin of the leaf, which seems to be forced up by it. The whole plant has very much the texture of Peltigera venosa, as Dillenius well observed; though, not having seen it recent, his description and figure are far from excellent. Mr. Lightfoot's are much better. The upper surface is smooth, but not shining, often longitudinally wrinkled. The shields are very numerous, scattered over the disk of the frond, and often clustered and confluent, of a small size, flat, reddish-brown or ruby-coloured, with an entire margin nearly of the same colour. Specimens which bear no shields are frequently nearly covered with grey granulations or warts, which have been pretended to be the male flowers, and are what Hedwig takes for buds. We are inclined to subject them to be rather analogous to gemmæ, or the bulbs of Lichen bulbosus, Dufourea bulbosa, &c. and that (as in them) the plant which bears them has a less tendency to bear flowers or seeds; though these warts do also occur on the shield-bearing fronds. We have never however traced them to young plants.

G.R. III.



Published by J. Sowerby London

BRYUM ſcoparium.

Broom Bryum.

CRYPTOGAMIA Muſci.

GEN. CHAR. *Capſ.* with a lid. *Veil* ſmooth. *Flower-ſtalk* from a terminal tubercle.

SPEC. CHAR. Capſules a little curved, with an awl-ſhaped lid. Leaves curved to one ſide. Stem reclining.

SYN. Bryum ſcoparium. *Linn. Sp. Pl.* 1582. *Hudſ. Fl. An.* 483. *With. Bot. Arr. v.* 3. 106. *Relh. Cant.* 403. *Curt. Lond. Faſc.* 1. *t.* 69.

B. erectis capitulis anguſtifolium, caule reclinato. *Raii Syn.* 95.

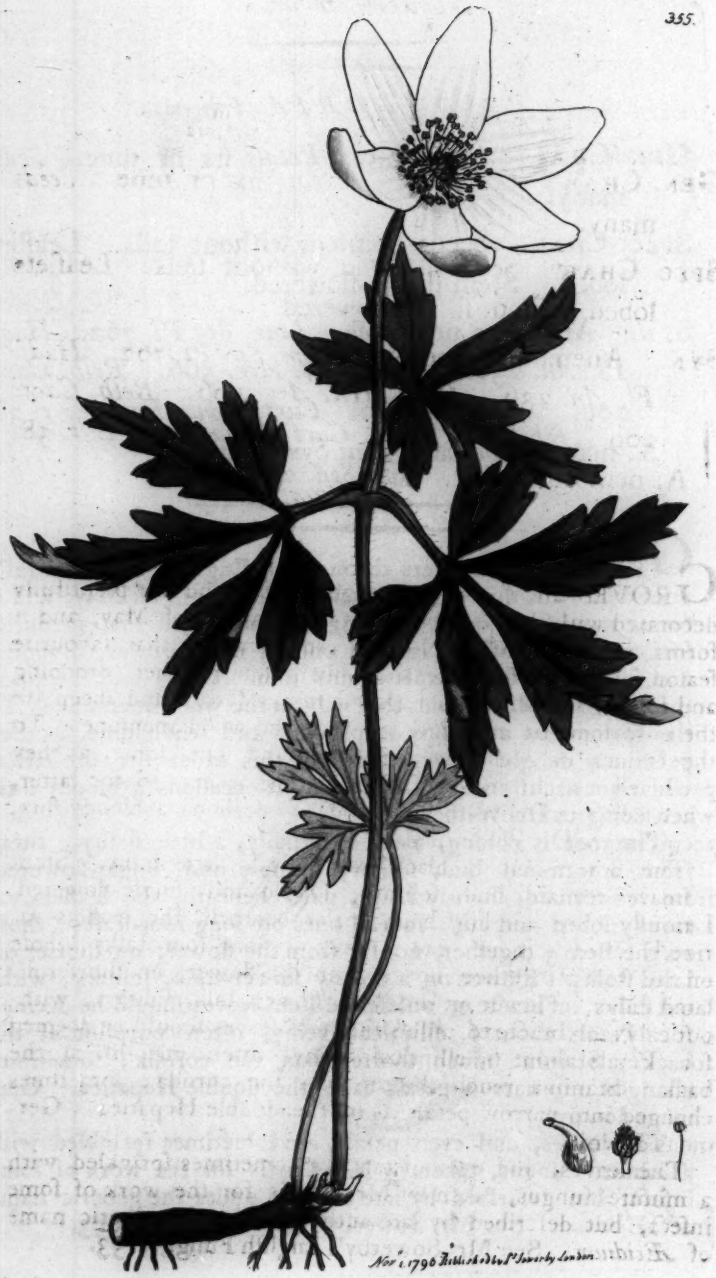
B. reclinatum, foliis falcatis, ſcoparum effigie. *Dill. Muſc.* 357. *t.* 46. *f.* 16.

Dicranum ſcoparium. *Sibth. Ox.* 281.

A COMMON moſs on heaths, dry paſture ground, and the trunks of trees, growing in large patches, eaſily diſcernible by their ſilky gloſſineſs, and which make an elegant kind of artificial turf for clothing the mould of garden pots, when kept in the houſe.

The ſtems are perennial, long, ſtanding cloſe together, but a little curved or reclining; clothed with brown ſilky down, and with numerous, thick-ſet, narrow, finely tapering, entire leaves, curved towards one ſide, eſpecially about the ſummit. The ſtalks appear in the early part of ſummer, ariſing from the ſcaly termination of each ſtem, and are long, erect, of a reddiſh ſhining yellow, and twiſted. They are moſtly ſolitary, and we have reaſon to ſuſpect the kind with cluſtered ſtalks, ſee *Dill. fig.* D, is a diſtinct ſpecies. The capſules are nearly cylindrical, a little curved. Lid long and taper. Veil of the ſame figure, ſtraw-coloured. Male flowers few, terminating ſome of the ſtems, and ſurrounded with leaves ſpreading in the form of a ſtar.

G.R.
III.



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ANEMONE nemoroſa.

Wood Anemone.

POLYANDRIA Polygynia.

GEN. CHAR. *Cal.* none. *Petals* ſix or nine. *Seeds* many.

SPEC. CHAR. Seeds pointed, without tails. Leaflets lobed. Stem ſingle-flowered.

SYN. Anemone nemoroſa. *Linn. Sp. Pl.* 762. *Hudſ. Fl. An.* 236. *With. Bot. Arr.* 566. *Relh. Cant.* 209. *Sibth. Ox.* 170. *Curt. Lond. Faſc.* 2. *t.* 38. A. nemorum alba. *Raii Syn.* 259.

GROVES and thickets throughout England are plentifully decorated with this elegant plant in the month of May, and it forms one of the moſt pleaſing ornaments of that favourite ſeaſon. The bloſſoms expand only in fine weather, drooping and folding up their petals againſt rain. Goats and ſheep are the only domeſtic animals that will eat the wood anemone. To the former its acrimony is pleaſant and wholeſome, as they peculiarly delight in vegetables of this order; to the latter, when not accuſtomed to ſuch food, it occaſions a bloody flux, according to Dr. Withering.

The root is oblong, black externally, a little fleſhy. Stem from a terminal bud, ſolitary, ſimple and ſingle-flowered. Leaves ternate, ſlightly hairy, paler beneath, the leaflets variouſly lobed and cut: radical ones on long foot-ſtalks: thoſe on the ſtem 3 together, not far from the flower, on ſhorter dilated ſtalks. Flower on a downy flower-ſtalk, ſolitary, without calyx or bracteæ, unleſs the ſtem-leaves ſhould be deemed ſo. Petals about 6, elliptical, veiny, often purpliſh at the back. Stamina much ſhorter than the corolla; ſometimes changed into narrow petals as in the double Hepatica. Germens downy.

The leaves, and even petals, are ſometimes ſprinkled with a minute fungus, taken by Mr. Curtis for the work of ſome inſect, but deſcribed by late authors under the generic name of *Æcidium*. See Mr. Sowerby's Engliſh Fungi, t. 53.

ANEMONE nemorosa.

Wood Anemone.

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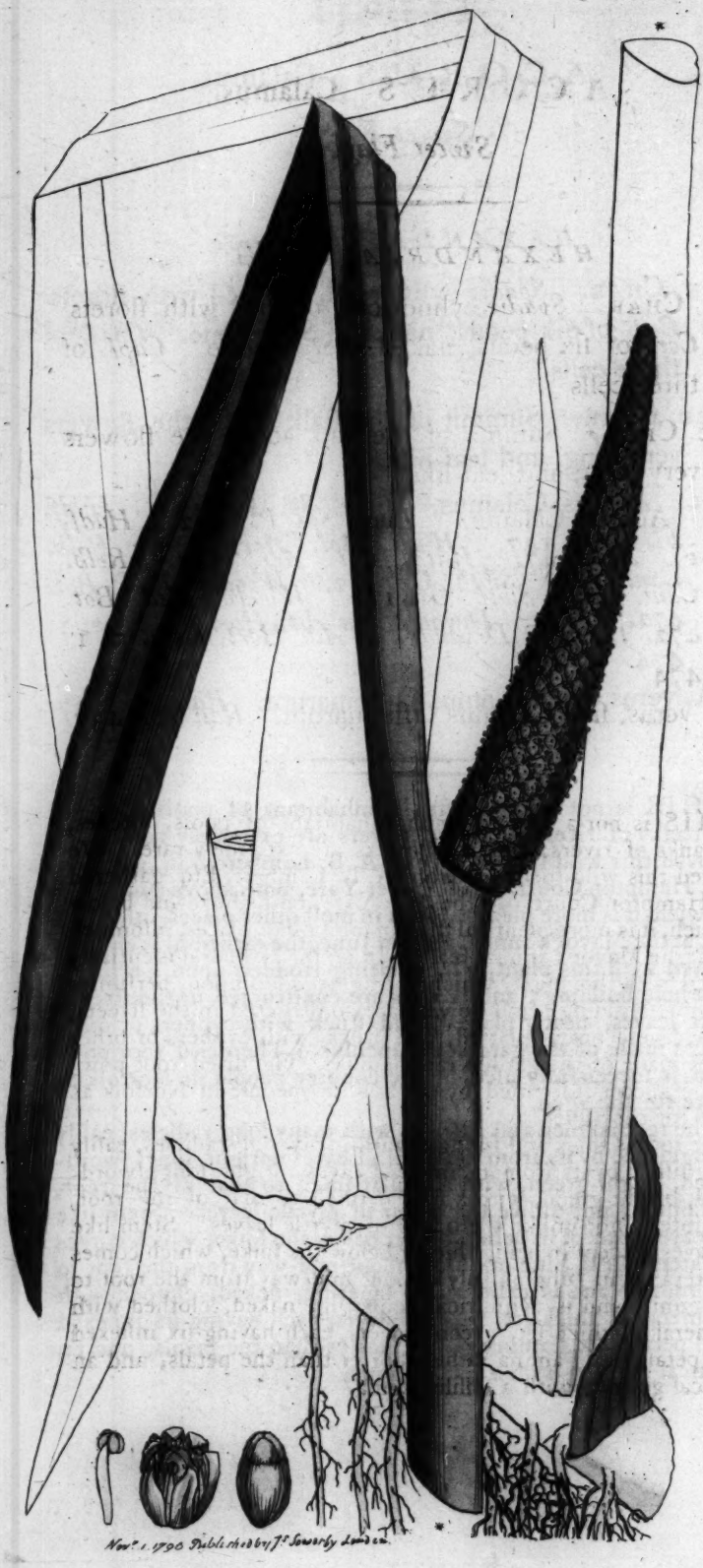
III.
BRITISH MUSEUM



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ACORUS Calamus.

Sweet Flag.

HEXANDRIA Monogynia.

GEN. CHAR. *Spadix* cylindrical, clothed with florets. *Cor.* of ſix petals, naked. *Style* none. *Capſ.* of three cells.

SPEC. CHAR. Summit of the ſtalk above the flowers very long, and leaf-like.

SYN. Acorus Calamus. *Linn. Sp. Pl.* 462. *Hudſ. Fl. An.* 147. *With. Bot. Arr.* 357. *Relh. Cant.* 140. *Sibth. Ox.* 112. *Woodv. Med. Bot.* 472. *t.* 173. *Dryandr. in Ait. Hort. Kew. v.* 1. 474.

A. verus, ſive Calamus Officinarum. *Raii Syn.* 437.

THIS is not a very common inhabitant of pools, ditches, and banks of rivers, and the flowers are extremely rare. We received this wild ſpecimen from A. B. Lambert, Eſq. gathered near Hampton Court. In the river Yare, both above and below Norwich, it is more plentiful than in moſt other places, inſomuch that, at the Mayor's annual feaſt in June, the cathedral is entirely ſtrewed with this plant, which, being trodden upon, perfumes the whole building; and bowers are conſtructed in the ſtreets, of its leaves, neatly platted, and ſtuck with cyphers or other devices made of the garden ranunculus. The dried root powdered is ſucceſsfully uſed by the country people in Norfolk as a cure for the ague.

The root is thick and ſpongy, with many long radicles, eaſily diſtinguiſhed by its aromatic ſmell. Leaves upright, long, ſword-ſhaped, bright-green, with a ſimilar ſmell to that of the root, but fainter; not unlike the odour of myrtle leaves. Stem like the leaves, except in being thicker below the ſpike, which comes out laterally (in June or July), about mid-way from the root to the ſummit, and is cylindrical, tapering, naked, clothed with innumerable, thick-ſet, green flowers, each having ſix inflexed equal petals, ſix ſtamina rather ſhorter than the petals, and an elliptical germen with a ſeſſile ſtigma.

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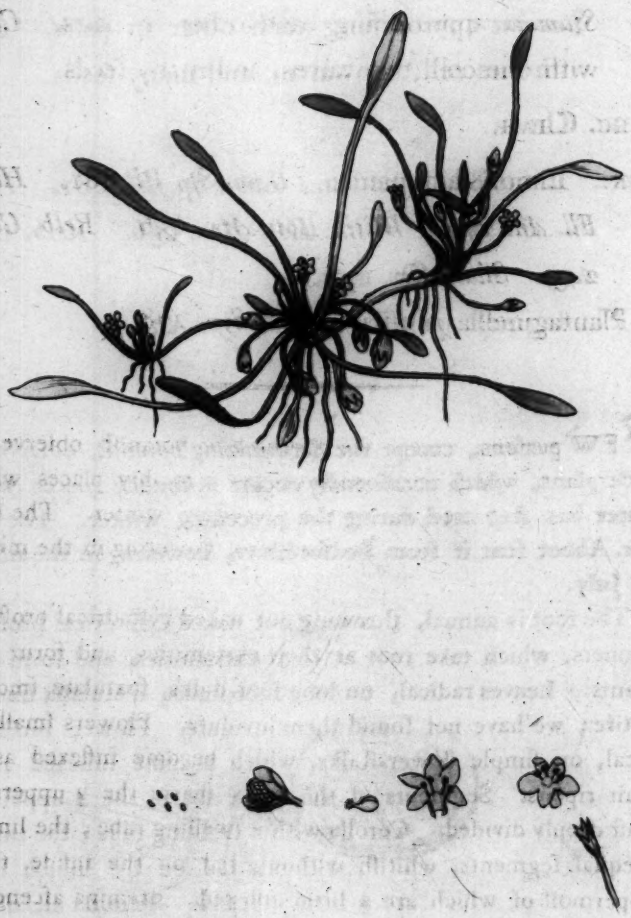

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LIMOSELLA aquatica.

Mudwort.

DIDYNAMIA Angioſpermia.

GEN. CHAR. *Cal.* five-cleft. *Cor.* five-cleft, equal. *Stamina* approaching each other in pairs. *Capſ.* with one cell, two valves, and many ſeeds.

SPEC. CHAR.

SYN. Limoſella aquatica. *Linn. Sp. Pl.* 881. *Hudſ. Fl. An.* 276. *With. Bot. Arr.* 656. *Relh. Cant.* 245. *Sibth. Ox.* 197.

Plantaginella paluſtris. *Raii Syn.* 278.

FEW perſons, except the ſcrutinizing botaniſt, obſerve this little plant, which occaſionally occurs in muddy places where water has ſtagnated during the preceding winter. The Rev. Mr. Abbot ſent it from Bedfordſhire, flowering in the middle of July.

The root is annual, throwing out naked cylindrical proſtrate runners, which take root at their extremities, and form new plants. Leaves radical, on long foot-ſtalks, ſpatulate, ſmooth, entire; we have not found them involute. Flowers ſmall, radical, on ſimple flower-ſtalks, which become inflexed as the fruit ripens. Segments of the calyx ſharp, the 2 uppermoſt leaſt deeply divided. Corolla with a ſwelling tube; the limb in 5 equal ſegments, whitiſh without, red on the inſide, the 2 uppermoſt of which are a little inflexed. Stamina aſcending, divaricated in pairs towards each ſide of the flower. Style declining, with a blunt rough ſtigma. Capſule globular, with a groove along its upper ſide. Seeds very numerous.

LIMOSELLA aquatica.

Mudwort.

DIDYNAMIA Angiospermia.

Gen. Char. Cal. five-cleft. Cor. five-cleft, equal. Stamina approaching each other in pairs. Caps. with one cell, two valves, and many seeds.

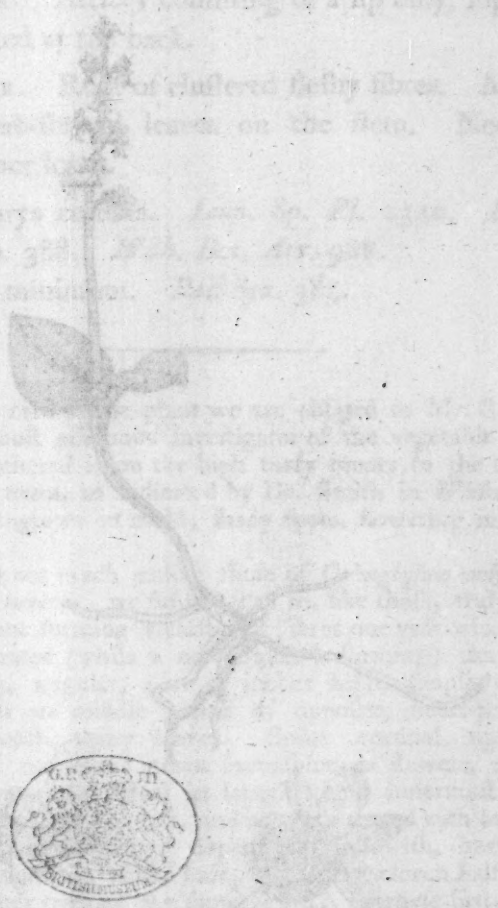
Spec. Char.

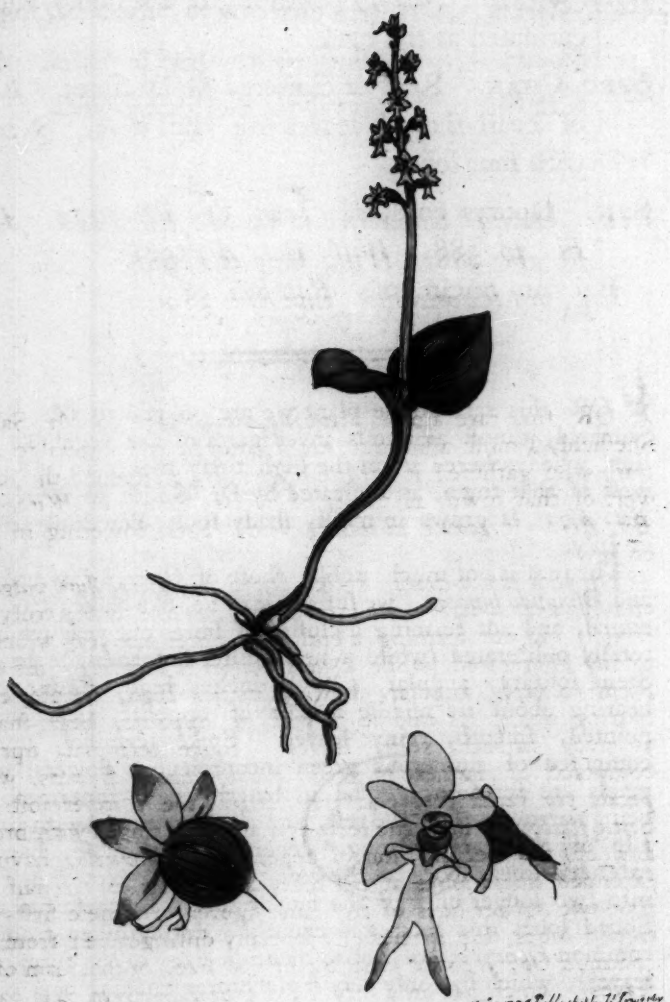
Syn. Limosella aquatica. Linn. Sp. Pl. 881. Fl. Fl. Am. 230. Fl. Dan. 656. Fl. Carn. 445. Sibth. Ox. 192.

Plantaginella palustris. Dill. Syn. 298.

THE roots, except the germinating botanist, observe this little plant, which occasionally occurs in muddy places where water has stagnated during the preceding winter. The Rev. Mr. Abbot sent it from Bedfordshire, flowering in the middle of July.

The root is annual, throwing out naked cylindrical prolifick runners, which take root at their extremities, and form new plants. Leaves radical, on long foot-stalks, spatulate, smooth, entire; we have not found them involute. Flowers small, radical, on simple flower-stalks, which become inflexed as the fruit ripens. Segments of the calyx sharp, the 2 uppermost leaf deeply divided. Corolla with a swelling tube; the limb in 5 equal segments, whitish without, red on the inside, the 2 uppermost of which are a little inflexed. Stamina ascending, divaricated in pairs towards each side of the flower. Style declining, with a blunt rough stigma. Capsule globular, with a groove along its upper side. Seeds very numerous.





OPHRYS cordata.

Heart-leaved Mountain Ophrys.

GYNANDRIA Diandria.

GEN. CHAR. *Nectary* conſiſting of a lip only, ſlightly carinated at the back.

SPEC. CHAR. Root of cluſtered fleſhy fibres. A pair of heart-ſhaped leaves on the ſtem. Nectary with four lobes.

SYN. Ophrys cordata. *Linn. Sp. Pl.* 1340. *Hudſ. Fl. An.* 388. *With. Bot. Arr.* 988.
Biſolium minimum. *Raii Syn.* 385.

FOR this rare alpine plant we are obliged to Mr. Salt of Sheffield, a moſt aſſiduous inveſtigator of the vegetable creation, who gathered it on the high turfy moors to the ſouth-weſt of that town, as indicated by Dr. Smith in *Withering's Bot. Arr.* It grows in moiſt, ſhady ſpots, flowering in June or July.

The root is not much unlike thoſe of *Ophioglo ſſum vulgatum* and *Oſmunda lunaria*; we ſuſpect it to be, like thoſe, truly perennial, and not forming a cluſter of fibres one year which are totally obliterated (while a new cluſter is forming) the next. Stem ſolitary, angular, 4 or 5 inches high, ſimple, erect, bearing about its middle a pair of oppoſite, heart-ſhaped, pointed, ſmooth, veiny leaves. Spike terminal, upright, compoſed of numerous green inconſpicuous flowers, whoſe petals are ſpreading, equal in length, the 2 innermoſt only being narrower than the reſt, and all often tinged with brown. Lip of the nectary long, dependent, yelloviſh, having 2 extended linear lobes at the baſe, and being cloven half way into two longer ones of the ſame figure. By theſe firſt-mentioned lobes this ſpecies is eſſentially diſtinguiſhed from the common *Ophrys ovata* (not to mention ſize, or the form of the leaves), which has only very ſlight prominences in that part of its nectary. The capſule is globoſe, purpliſh, crowned with the permanent withering corolla, and burſting by lateral clefts.

OPHRYS cordata.

Heart-leaved Mountain Ophrys.

GYNANDRIA Diandria.

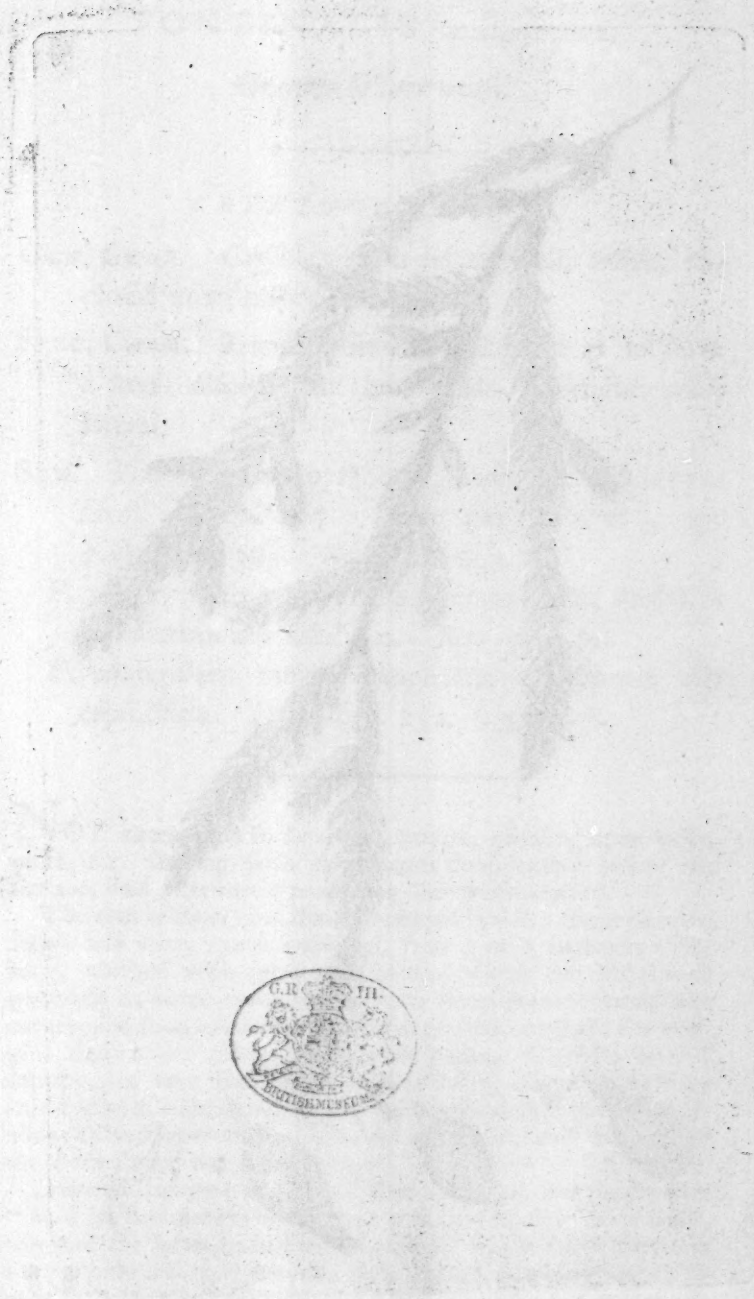
Gen. Char. Nectary consisting of a lip only, slightly carinated at the back.

Spec. Char. Root of clustered fleshy fibres. A pair of heart-shaped leaves on the stem. Nectary with four lobes.

Syn. Ophrys cordata. Linn. Sp. Pl. 1340. Fl. Lap. 388. With. Bot. Arr. 988.
Dicholium minimum. Linn Syn. 385.

FOR this rare alpine plant we are obliged to Mr. Salt of Sheffield, a most ardent investigator of the vegetable creation, who gathered it on the high rugged moors to the southwest of that town, as indicated by Dr. Smith in Withering's Bot. Arr. It grows in moist, shady spots, flowering in June or July.

The root is not much unlike those of Ophrys [illegible] and Orchis mascula, we suspect it to be, like those, truly perennial, and not forming a cluster of fibres one year which are totally obliterated (while a new cluster is forming) the next. Stem solitary, angular, 4 or 5 inches high, simple, erect, bearing about its middle a pair of cordate, heart-shaped, pointed, smooth, veiny leaves. Spike terminal, upright, compacted of numerous green inconspicuous flowers, whose petals are spreading, equal in length, the 3 outermost only being narrower than the rest, and all often tinged with brown. Lip of the nectary long, depressed, yellow, having 2 extended linear lobes at the base, and being cleven half way into two longer ones of the same figure. The whole herb-resembles this species is essentially distinguished from the common Ophrys [illegible] (not to mention the, or the form of its leaves), which has only very slight pretensions to that part of its nectary. The capsule is globose, purplish, crowned with the permanent withering corolla, and bursting by lateral clefts.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Nov.1 1798 Published by J.Sowerby London

FONTINALIS antipyretica.

Greater Water-moſs.

CRYPTOGAMIA Muſci.

GEN. CHAR. *Capſule* with a lid and veil, ſeſſile, encloſed in an imbricated calyx.

SPEC. CHAR. Leaves pointed, folded ſo as to form a keel, diſpoſed in three ranks. Fructification lateral.

SYN. Fontinalis antipyretica. *Linn. Sp. Pl.* 1571. *Hudſ. Fl. An.* 467. *With. Bot. Arr. v.* 3. 75. *Relh. Cant.* 395. *Sibth. Ox.* 293.

F. major, foliis triangularibus complicatis, capitulis in foliorum alis ſeſſilibus. *Raii Syn.* 79.

F. triangularis major complicata, e foliorum alis capſulifera. *Dill. Muſc.* 254. *t.* 33. *f.* 1.

NOT uncommon in ſlow deep waters, growing upon rocks, poſts, &c. floating with the ſtream conſiderably below the ſurface, and very rarely producing any fructification.

The root is ſmall, but ſtrong, and perennial. Stem ſlender, tough and wiry, much branched, from 3 or 4 inches to a foot long, clothed with numerous leaves, which are imbricated generally in three rows, of an ovate ſharp-pointed form, but compreſſed ſo as to become acutely carinated, entire in the margin, their colour a deep tranſparent green. Capſules lateral, ſolitary, on very ſhort ſcaly flower-ſtalks, elliptical, entirely inveſted with imbricated ſcales, and their orifice ciliated with about 16 red taper teeth. The lid is conical, and the veil of the ſame form, but rather longer.

Linnæus informs us, in his Flora Suecica, that the Swedes "ſtuff in this moſs between their chimneys and wooden walls, to guard the latter from fire:" a paſſage which Engliſh writers have greatly miſapprehended; for, without ſuppoſing any thing very incombuſtible in its nature, it may anſwer the purpoſe above deſcribed merely by preventing the paſſage of air.

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BRYUM carneum.

Shining Bryum.

CRYPTOGAMIA Muſci.

GEN. CHAR. *Capſ.* with a lid. *Veil* ſmooth. *Flower-ſtalk* from a terminal tubercle.

SPEC. CHAR. Capſules pendulous, ſomewhat globular. Leaves alternate, acute, and entire.

SYN. Bryum carneum. *Linn. Sp. Pl.* 1587. *Hudſ. Fl. An.* 489. *With. Bot. Arr. v.* 3. 112.

B. nitidum, foliis Serpilli pellucidis anguſtioribus, reflexis capitulis ſubrotundis, carnei coloris, in pediculis brevioribus. *Raii Syn.* 102.

B. lanceolatum pellucidum, capſulis rotundis, pendulis, carneis. *Dill. Muſc.* 400. *t.* 50. *f.* 69.

SENT from Cambridgeſhire by the Rev. Mr. Hemſted. It is an uncommon, and not generally known ſpecies, growing in moiſt ſhady places, among graſs, and by the margins of little rills, bearing its fruit in the ſpring.

Root perennial. Stems ſhort, ſlender, ſimple at firſt, clothed with thick-ſet, alternate, lanceolate, pointed, entire leaves, of a bright pellucid green. Stalk terminal, a little longer than the ſtems, reddiſh, ſhining, pellucid and ſucculent. Capſule pendulous, when young green, pear-ſhaped and very obtuſe, with a depreſſed lid; but as it ripens becoming of a fleſh-coloured red, and when arrived at maturity the orifice is much dilated, ſo that in ſome ſpecimens the capſule may be called almoſt campanulate. Our figure is not in that advanced ſtate. The veil we have not ſeen. Dillenius repreſents it as awl-ſhaped and very tender, falling off the young capſules before they begin to nod. When the fruit is ripe, young ſhoots are protruded from the top of the ſtem, ſo that the fruit-ſtalks are no longer terminal.

We have compared ours with the ſpecimens of Dillenius.

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